09/090,375

********** Welcome to STN International **********

************** STN Columbus **************

FILE 'HOME' ENTERED AT 16:59:36 ON 03 JAN 1999

=> set plurals on

SET COMMAND COMPLETED

=> file medline cancerlit biosis embase wpids

COST IN U.S. DOLLARS SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST 0.45 0.45

FILE 'MEDLINE' ENTERED AT 17:01:15 ON 03 JAN 1999

FILE 'CANCERLIT' ENTERED AT 17:01:15 ON 03 JAN 1999

FILE 'BIOSIS' ENTERED AT 17:01:15 ON 03 JAN 1999
COPYRIGHT (C) 1999 BIOSIS(R)

: 'EMBASE' ENTERED AT 17:01:15 ON 03 JAN 1999
'YRIGHT (C) 1999 Elsevier Science B.V. All rights reserved.

FILE 'WPIDS' ENTERED AT 17:01:15 ON 03 JAN 1999
COPYRIGHT (C) 1999 DERWENT INFORMATION LTD

=> s fc.epsilon.ri

3 FILES SEARCHED...
L1 2224 FC.EPSILON.RI

=> s mast cell

L2 62101 MAST CELL

=> s fc.epsilon. or ige(w)receptor

L3 6557 FC.EPSILON. OR IGE(W) RECEPTOR

=> s l1 and l2

L4 1244 L1 AND L2

=> s l4 and (antibod? or monoclon? or chimeric(w)antibod? or chimeric(w)monoclon?)

L5 404 L4 AND (ANTIBOD? OR MONOCLON? OR CHIMERIC(W) ANTIBOD? OR
CHIMERIC(W) MONOCLON?)

; l5 and (allerg?)

L6 101 L5 AND (ALLERG?)

=> dup rem

ENTER L# LIST OR (END): l6

PROCESSING COMPLETED FOR L6
L7 52 DUP REM L6 (49 DUPLICATES REMOVED)

=> s l7 and (inhibit? or reduc? or ameliorat? or compet?)

L8 22 L7 AND (INHIBIT? OR REDUC? OR AMELIORAT? OR COMPET?)

=> d l8 1-22 ibib ab

L8 ANSWER 1 OF 22 MEDLINE
ACCESSION NUMBER: 1998196410 MEDLINE
DOCUMENT NUMBER: 98196410
TITLE: Is tyrosine kinase activation involved in basophil histamine release in asthma due to western red cedar?.
AUTHOR: Frew A; Chan H; Salari H; Chan-Yeung M
CORPORATE SOURCE: Department of Medicine Vancouver General Hospital, University of British Columbia, Canada.
SOURCE: ALLERGY, (1998 Feb) 53 (2) 139-43.
Journal code: 39C. ISSN: 0105-4538.
PUB. COUNTRY: Denmark
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199807
ENTRY WEEK: 19980705
AB Occupational asthma due to western red cedar is associated with histamine release from basophils and **mast cells** on exposure to plicatic acid (PA), but the mechanisms underlying this response remain unclear. Specific kinase **inhibitors** were used to study the role of tyrosine and serine/threonine kinases in PA-induced histamine release from human basophils. Pretreatment with the tyrosine kinase **inhibitor** methyl 2,5-dihydroxy-cinnamate (MDHC) attenuated histamine release from basophils triggered by anti-IgE (29.8% **inhibition**; n = 15; P < 0.01) or grass pollen (48% **inhibition**; n = 6; P < 0.01). **Inhibition** was concentration-dependent and could be reversed by washing the cells in buffer, while the inactive stereoisomer of MDHC did not affect histamine release. In contrast, the protein kinase C **inhibitor** staurosporine did not affect histamine release by either anti-IgE or grass pollen. Pretreatment with MDHC partially **inhibited** PA-induced histamine release from basophils of 6/9 patients with red cedar asthma (25.4% vs 33.8%; P = NS). Staurosporine gave a similar level of **inhibition** of PA-induced histamine release (25.3% vs 33.8%; P = NS). Thus, signal transduction of the human basophil **Fc epsilon RI** appears to depend upon tyrosine kinase activation, but not on protein kinase C (serine/threonine kinase) activation. The lack of specific effect on plicatic acid-induced histamine release in basophils obtained from patients with occupational asthma due to western red cedar suggests that tyrosine kinases are not as important in this disease as in atopic asthma, and is consistent with the view that histamine release in red cedar asthma is largely IgE-independent.

L8 ANSWER 2 OF 22 MEDLINE
ACCESSION NUMBER: 97477414 MEDLINE
DOCUMENT NUMBER: 97477414
TITLE: Negative regulation of **Fc epsilon RI**-mediated degranulation by CD81.
AUTHOR: Fleming T J; Donnadieu E; Song C H; Laethem F V; Galli S J; Kinet J P
CORPORATE SOURCE: Department of Pathology, Beth Israel Deaconess Medical Center, Boston, Massachusetts 02215, USA.
CONTRACT NUMBER: CA/AI-72074 (NCI)
AI/CA-23990 (NIAID)
GM-53950 (NIGMS)
SOURCE: JOURNAL OF EXPERIMENTAL MEDICINE, (1997 Oct 20) 186
(8) 1307-14.
Journal code: I2V. ISSN: 0022-1007.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals; Cancer Journals
ENTRY MONTH: 199801
ENTRY WEEK: 19980104
AB Signaling through the high affinity receptor for immunoglobulin E (**Fc epsilon RI**) results in the coordinate activation of tyrosine kinases before calcium mobilization. Receptors capable of interfering with the signaling of antigen receptors, such as **Fc epsilon RI**, recruit tyrosine and inositol phosphatases that results in diminished calcium mobilization. Here, we show that **antibodies** recognizing CD81 **inhibit Fc epsilon RI**-mediated **mast cell** degranulation but, surprisingly, without affecting aggregation-dependent tyrosine phosphorylation, calcium mobilization, or leukotriene synthesis. Furthermore, CD81 **antibodies** also **inhibit mast** cell degranulation in vivo as measured by **reduced** passive cutaneous anaphylaxis responses. These results reveal an unsuspected calcium-independent pathway of antigen receptor regulation, which is accessible to engagement by membrane proteins and on which novel therapeutic approaches to **allergic** diseases could be based.

L8 ANSWER 3 OF 22 MEDLINE
ACCESSION NUMBER: 97166096 MEDLINE
DOCUMENT NUMBER: 97166096
TITLE: Down-regulation of **Fc(epsilon) RI** expression on human basophils during in vivo treatment of atopic patients with anti-IgE **antibody**.
AUTHOR: MacGlashan D W Jr; Bochner B S; Adelman D C; Jardieu P M; Togias A; McKenzie-White J; Sterbinsky S A; Hamilton R G; Lichtenstein L M
CORPORATE SOURCE: Johns Hopkins Asthma and Allergy Center, Baltimore,
MD 21224, USA.. dmacglas@welchlink.welch.jhu.edu
CONTRACT NUMBER: AI07290 (NIAID)
AI20253 (NIAID)
SOURCE: JOURNAL OF IMMUNOLOGY, (1997 Feb 1) 158 (3) 1438-45.
Journal code: IFB. ISSN: 0022-1767.
PUB. COUNTRY: United States
(CLINICAL TRIAL)
(CLINICAL TRIAL, PHASE I)
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals; Cancer Journals
ENTRY MONTH: 199704
ENTRY WEEK: 19970404
AB Treatment of **allergic** disease by decreasing circulating IgE with anti-IgE Abs is currently under clinical study. Based on previous unrelated studies, it appeared likely that **Fc(epsilon)RI** expression on basophils and **mast cells** might also be regulated by levels of circulating IgE Ab. Therefore, the expression of IgE and **Fc(epsilon)RI** on human basophils was examined in 15 subjects receiving humanized anti-IgE mAb intravenously. Treatment with the anti-IgE mAb decreased free IgE levels to 1% of pretreatment levels and also resulted in a marked down-regulation of **Fc(epsilon)RI** on basophils. Median pretreatment densities of **Fc(epsilon)RI** were approximately 220,000 receptors per basophil and after 3 mo of treatment, the densities had decreased to a median of 8,300 receptors per basophil. Flow cytometric studies, conducted in parallel, showed similar results and also showed in a subset of 3 donors that receptors decreased with a t1/2 of approximately 3 days. The responsiveness of the cells to IgE-mediated stimulation using anti-IgE Ab was marginally decreased (approximately 40%) while the response of the same cells to stimulation with dust mite Ag, Dermatophagoides farinae, was **reduced** by approximately 90%. One possible explanation for these results is that **Fc (epsilon)RI** density is directly or indirectly regulated by plasma-free IgE levels.

L8 ANSWER 4 OF 22 MEDLINE
ACCESSION NUMBER: 96354665 MEDLINE
DOCUMENT NUMBER: 96354665
TITLE: Oxatomide **inhibits** the release of proinflammatory mediators from human basophils and **mast cells**.
AUTHOR: Patella V; de Crescenzo G; Marino O; Spadaro G; Genovese A; Marone G
CORPORATE SOURCE: Division of Clinical Immunology and Allergy, Faculty of Medicine, University of Naples Federico II, Italy.
SOURCE: INTERNATIONAL ARCHIVES OF ALLERGY AND IMMUNOLOGY,
(1996 Sep) 111 (1) 23-9.

Journal code: BJ7. ISSN: 1018-2438.
PUB. COUNTRY: Switzerland
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199612
AB Oxatomide (OXA), a histamine H1 receptor antagonist, is effective in the treatment of patients with **allergic** rhinitis, some **allergic** skin disorders, and bronchial asthma. We have characterized the effect of OXA on the immunologic release of preformed (histamine and tryptase) and de novo synthesized mediators (leukotriene C4:LTC4 and prostaglandin D2:PGD2) from human basophils and **mast cells** purified (from 10 to 82%) from human lung parenchyma (HLMC) and skin tissue (HSMC). Preincubation (15 min, 37 degrees C) of basophils with OXA (10(-7)-10(-5) M) before Der p I antigen or anti-IgE challenge concentration-dependently (10-40%) **inhibited** the immunologic release of histamine and LTC4. OXA (10(-7)-10(-5) M) also **inhibited** (10-40%) histamine, tryptase and LTC4 release from HLMC activated by anti-IgE. In addition, OXA caused a concentration-dependent **inhibition** of histamine, tryptase and PGD2 release from HSMC immunologically challenged with a **monoclonal** **antibody** against the alpha chain of the high affinity receptor for IgE (anti-**Fc epsilon RI**) or anti-IgE. These results demonstrate that OXA exerts anti-inflammatory activities by **inhibiting** the release of preformed and de novo synthesized mediators from human basophils and **mast cells**.

L8 ANSWER 5 OF 22 MEDLINE
ACCESSION NUMBER: 96159699 MEDLINE
DOCUMENT NUMBER: 96159699
TITLE: Evidence for IgG autoantibodies to galectin-3, a beta-galactoside-binding lectin (Mac-2, epsilon binding protein, or carbohydrate binding protein 35) in human serum.
AUTHOR: Mathews K P; Konstantinov K N; Kuwabara I; Hill P N; Hsu D K; Zuraw B L; Liu F T
CORPORATE SOURCE: Department of Molecular & Experimental Medicine, Scripps Research Institute, La Jolla, California 92037, USA.
CONTRACT NUMBER: AI32834 (NIAID)
RR00833 (NCRR)
SOURCE: JOURNAL OF CLINICAL IMMUNOLOGY, (1995 Nov) 15 (6) 329-37.
Journal code: HRC. ISSN: 0271-9142.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199605
AB Galectin-3 is a beta-galactoside-binding animal lectin formerly called epsilon protein, Mac-2, carbohydrate binding protein 35, CBH 30, L-29, or L34. The possible occurrence of autoantibodies to galectin-3 was investigated because crosslinking of galectins bound to IgE or **Fc epsilon RI** might produce mediator release from **mast cells** or basophils. Unexpectedly, a control serum from an individual free of current **allergic** symptoms was found to have a significantly elevated level of IgG anti-galectin-3 by ELISA employing galectin-3-coated wells incubated with test serum followed by HRPO-conjugated goat anti-human IgG. The reaction was not **inhibitable** by lactose, suggesting that it is not a result of binding of IgG by galectin-3 through lectin-carbohydrate interactions. The **antibody** activity was specifically adsorbed by galectin-3 and protein A-conjugated Sepharose and was associated primarily with subclass IgG1. The presence of the **antibodies** was confirmed by immunoblotting showing binding of IgG to the 30-kD galectin-3 band. The relevant epitopes were in the galectin-3 N-terminal domain. The propositus was subsequently found to have adenocarcinoma of the colon, and titers of IgG anti-galectin-3 were found to be sharply elevated after hemicolectomy. Similar **antibody** titers have not been found in family members, but small numbers of normal persons and patients with malignant neoplasms have been found to have evidence of IgG anti-galectin-3 **antibodies** at lower titers than the propositus. The pathogenesis of this autoimmune reaction is unclear, though there is a trend for it to occur in older persons.

L8 ANSWER 6 OF 22 MEDLINE
ACCESSION NUMBER: 96028104 MEDLINE
DOCUMENT NUMBER: 96028104
TITLE: Multiple defects in the immune system of Lyn-deficient mice, culminating in autoimmune disease.
AUTHOR: Hibbs M L; Tarlinton D M; Armes J; Grail D; Hodgson G; Maglitto R; Stacker S A; Dunn A R
CORPORATE SOURCE: Ludwig Institute for Cancer Research, Melbourne Tumour Biology Branch, Royal Melbourne Hospital, Victoria, Australia..
CONTRACT NUMBER: A1-03958
SOURCE: CELL, (1995 Oct 20) 83 (2) 301-11.
Journal code: CQ4. ISSN: 0092-8674.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals; Cancer Journals
ENTRY MONTH: 199602
AB Mice homozygous for a disruption at the Lyn locus display abnormalities associated with the B lymphocyte lineage and in **mast cell** function. Despite **reduced** numbers of recirculating B lymphocytes, Lyn-/- mice are immunoglobulin M (IgM) hyperglobulinemic. Immune responses to T-independent and T-dependent antigens are affected. Lyn-/- mice fail to mediate an **allergic** response to IgE cross-linking, indicating that activation of LYN plays an indispensable role in **Fc epsilon RI** signaling. Lyn-/- mice have circulating autoreactive **antibodies**, and many show severe glomerulonephritis caused by the deposition of IgG immune complexes in the kidney, a pathology reminiscent of systemic lupus erythematosus. Collectively, these results implicate LYN as having an indispensable role in immunoglobulin-mediated signaling, particularly in establishing B cell tolerance.

L8 ANSWER 7 OF 22 MEDLINE
ACCESSION NUMBER: 95348516 MEDLINE
DOCUMENT NUMBER: 95348516
TITLE: **Allergen**-induced histamine release in rat **mast cells** transfected with the alpha subunits of **Fc epsilon RI**.
AUTHOR: Lowe J; Jardieu P; VanGorp K; Fei D T
CORPORATE SOURCE: Department of BioAnalytical Technology, South San Francisco, CA 94080, USA..
SOURCE: JOURNAL OF IMMUNOLOGICAL METHODS, (1995 Jul 17) 184
(1) 113-22.
Journal code: IFE. ISSN: 0022-1759.
PUB. COUNTRY: Netherlands
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals; Cancer Journals
ENTRY MONTH: 199511
AB A rat **mast cell** histamine assay (RMCHA) has been developed to quantitate the biological activity of a recombinant **humanized**, **monoclonal** anti-IgE **antibody** (rhuMAbE25). Rat **mast cells** (RBL 48), transfected with the alpha subunit of the high affinity human IgE receptor (**Fc epsilon RI**), were presensitized for 2 h with human plasma containing IgE specific for ragweed and challenged with ragweed **allergen** in the presence of 50% D2O. Histamine release plateaus at 0.1 micrograms/ml of ragweed. The release of histamine was time, temperature and Ca2+ dependent. This ragweed-induced histamine release could be **inhibited** by rhuMAbE25 in a dose-dependent fashion with an IC50 of 1.19 +/- 0.31 micrograms/ml (n = 25). Other humanized MAbs and recombinant human growth factors neither trigger histamine release nor **inhibit** ragweed-induced histamine release. This RMCHA correlates well with the human basophil histamine assay (HBHA) (Fei et al., 1994) with a correlation coefficient of 0.93 (n = 59, p < 0.0001). Histamine was also released when the cells were presensitized with human plasma containing the respective **allergen**-specific IgE and then challenged with standardized mite, D. farinae, house dust mix, standardized cat pelt, or Alternaria tenuis. Comparison of **allergen**-induced histamine release showed a good correlation between RMCHA and HBHA with a correlation coefficient of 0.69 (n = 37, p = 0.0001). We conclude that RMCHA provides a useful tool to confirm **allergen**-specific IgE in **allergic** patients and can be used to evaluate the biological activity of any anti-IgE **monoclonal antibody**. Moreover, RMCHA provides an unique opportunity to study the mechanism of IgE-mediated histamine release in the absence of interfering proteins and growth factors normally present in whole blood.

L8 ANSWER 8 OF 22 MEDLINE
ACCESSION NUMBER: 95164687 MEDLINE
DOCUMENT NUMBER: 95164687
TITLE: Regulation of high-affinity IgE receptor-mediated **mast cell** activation by murine low-affinity IgG receptors.
AUTHOR: Daeron M; Malbec O; Latour S; Arock M; Fridman W H
CORPORATE SOURCE: Laboratoire d'Immunologie Cellulaire et Clinique, INSERM U255, Institut Curie, Paris, France.
SOURCE: JOURNAL OF CLINICAL INVESTIGATION, (1995 Feb) 95 (2) 577-85.
Journal code: HS7. ISSN: 0021-9738.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals; Cancer Journals
ENTRY MONTH: 199505
AB **Allergic** symptoms result from the release of granular and lipidic mediators and of cytokines by inflammatory cells. The whole process is initiated by the aggregation of **mast cell** and basophil high-affinity IgE receptors (**Fc epsilon RI**) by IgE and antigen. We report here that IgE-induced release of mediator and cytokine can be **inhibited** by cross-linking **Fc epsilon RI** to low-affinity IgG receptors (Fc gamma RII) which are constitutively expressed on **mast cells** and basophils. Using a model of stable transfectants in RBL-2H3 cells expressing endogeneous rat **Fc epsilon RI** and recombinant murine Fc gamma RII, we showed that **inhibition** requires that **Fc epsilon RI** be crosslinked to Fc gamma RII by the same multivalent ligand. **Inhibition** of cross-linked receptors left non-cross-linked **Fc epsilon RI** capable of triggering mediator release and was reversible upon disengagement. Both isoforms of wild-type Fc gamma RII were equally capable of **inhibiting Fc epsilon RI**-mediated **mast cell** activation provided they had an intact intracytoplasmic domain. Our results demonstrate that **mast cell** secretory responses triggered by high-affinity receptors for IgE may be controlled by low-affinity receptors for IgG. This regulation of **Fc epsilon RI**-mediated **mast cell** activation is of potential interest in **mast cell** physiology and in **allergic** pathology.

L8 ANSWER 9 OF 22 MEDLINE
ACCESSION NUMBER: 92235616 MEDLINE
DOCUMENT NUMBER: 92235616
TITLE: Epidermal Langerhans cells from normal human skin bind monomeric IgE via **Fc epsilon RI**.
AUTHOR: Wang B; Rieger A; Kilgus O; Ochiai K; Maurer D; Fodinger D; Kinet J P; Stingl G
CORPORATE SOURCE: Department of Dermatology I, University of Vienna Medical School, Austria..

SOURCE: JOURNAL OF EXPERIMENTAL MEDICINE, (1992 May 1) 175
(5) 1353-65.
Journal code: I2V. ISSN: 0022-1007.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals; Cancer Journals
ENTRY MONTH: 199207
AB Human epidermal Langerhans cells (LC) bearing IgE are found in disease states associated with hyperimmunoglobulinemia E. When studying the mechanism(s) underlying this phenomenon, immunohistology revealed that a majority of epidermal LC from normal skin of healthy individuals can specifically bind monomeric IgE. IgE binding to LC could neither be prevented by preincubation of the tissue with **monoclonal antibodies** (mAb) against either Fc epsilon RII/CD23 or Fc gamma RII/CD32, nor by the addition of lactose. However, binding could be entirely abrogated by preincubation with the anti-**Fc epsilon RI** alpha mAb 15-1, which interferes with IgE binding to **Fc epsilon RI** alpha gamma transfectants. These observations indicated that IgE binding to epidermal LC is [illegible]mediated by **Fc epsilon RI** rather than [illegible]y CD23, CD32, or the D-galactose-specific IgE-binding protein. This assumption gained support from our additional findings that: (a) the majority of LC exhibited distinct surface immunolabeling with the anti-**Fc epsilon RI** alpha mAbs 15-1 and 19-1, but not with any of eight different anti-Fc epsilon RII/CD23 mAbs; and (b) transcripts for the alpha, beta, and gamma chains of **Fc epsilon RI** could be amplified by polymerase chain reaction from RNA preparations of LC-enriched, but not of LC-depleted, epidermal cell suspensions. In view of the preeminent role of **Fc epsilon RI** crosslinking on **mast cells** and basophils in triggering the synthesis and release of mediators of **allergic** reactions, the demonstration of this receptor on epidermal LC may have important implications for our understanding of **allergic** reactions after epicutaneous contact with **allergens**.

L8 ANSWER 10 OF 22 MEDLINE
ACCESSION NUMBER: 92037520 MEDLINE
DOCUMENT NUMBER: 92037520
TITLE: Immunologically activated chloride channels involved in degranulation of rat mucosal **mast cells**.
AUTHOR: Romanin C; Reinsprecht M; Pecht I; Schindler H
CORPORATE SOURCE: Institute for Biophysics, University of Linz, Austria..
SOURCE: EMBO JOURNAL, (1991 Dec) 10 (12) 3603-8.
Journal code: EMB. ISSN: 0261-4189.
[illegible]. COUNTRY: ENGLAND: United Kingdom
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199202
AB Crosslinking of type I Fc epsilon receptors (**Fc epsilon RI**) on the surface of basophils or **mast cells** initiates a cascade of processes leading to the secretion of inflammatory mediators. We report here a correlation between mediator secretion and the activation of Cl- channels in rat mucosal-type **mast cells** (line RBL-2H3). Stimulation of RBL cells by either IgE and antigen or by a **monoclonal antibody** specific for the **Fc epsilon RI**, resulted in the activation of Cl- ion channels as detected by the patch-clamp technique. Channel activation occurred slowly, within minutes after stimulation. The channel has a slope conductance of 32 pS at potentials between 0 and -100 mV, and an increasing open-state probability with increasing depolarization. Activation of apparently the same Cl- channels could be mimicked without stimulation by isolating inside-out membrane patches in tyrode solution. Parallel **inhibition** of both Cl- channel activity and mediator secretion, as monitored by serotonin release, was observed by two compounds, the Cl- channel blocker 5-nitro-2-(3-phenylpropylamino) benzoic acid (NPPB) and the anti-**allergic** drug cromolyn. NPPB **inhibited** both the antigen-induced Cl- current and the serotonin release, where half-maximal **inhibition** occurred at similar doses, at 52 microM and 77 microM, respectively. The drug cromolyn, recently found to **inhibit** immunologically induced mediator secretion from RBL cells upon intracellular application, also blocks Cl- channels (IC50 = 15 microM) when applied to the cytoplasmic side of an inside-out membrane patch. The observed Cl- channel activation upon immunological stimulation and the parallel **inhibition** of channel current and of serotonin release suggests a functional role for this Cl- channel in mediator secretion from the **mast cells** studied.

L8 ANSWER 11 OF 22 MEDLINE
ACCESSION NUMBER: 91114691 MEDLINE
DOCUMENT NUMBER: 91114691
TITLE: Mapping of the high affinity Fc epsilon receptor binding site to the third constant region domain of IgE.
AUTHOR: Nissim A; Jouvin M H; Eshhar Z
CORPORATE SOURCE: Department of Chemical Immunology, Weizmann Institute of Science, Rehovot, Israel.
SOURCE: EMBO JOURNAL, (1991 Jan) 10 (1) 101-7.
Journal code: EMB. ISSN: 0261-4189.
PUB. COUNTRY: ENGLAND: United Kingdom
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199105
AB Identification of the precise region(s) on the IgE molecule that take part in the binding of IgE to its high affinity receptor (**Fc epsilon RI**) may lead to the design of IgE analogues able to block the **allergic** response. To localize the **Fc epsilon RI**-binding domain of mouse IgE, we attempted to confer on human IgE, which normally does not bind to the rodent receptor, the ability to bind to the rat **Fc epsilon RI**. Employing exon shuffling, we have expressed chimeric epsilon-heavy chain genes composed of a mouse (4-hydroxy-3-nitrophenyl)acetic acid (NP)-binding VH domain, and human C epsilon in which various domains were replaced by their murine counterparts. This has enabled us to test the **Fc epsilon RI**-binding of each mouse IgE domain while maintaining the overall conformation of the molecule. All of the chimeric IgE molecules which contain the murine C epsilon 3, bound equally to both the rodent and human receptor, as well as to **monoclonal antibodies** recognizing a site on IgE which is identical or very close to the **Fc epsilon RI** binding site. Deletion of the second constant region domain did not impair either the binding capacity of the mutated IgE or its ability to mediate **mast cell** degradation. These results assign the third epsilon domain of IgE as the principal region involved in the interaction with the **Fc epsilon RI**.

L8 ANSWER 12 OF 22 BIOSIS COPYRIGHT 1999 BIOSIS
ACCESSION NUMBER: 1997:170853 BIOSIS
DOCUMENT NUMBER: PREV199799477256
TITLE: The effect of intravenous administration of a chimeric anti-IgE **antibody** on serum IgE levels in atopic subjects: Efficacy, safety, and pharmacokinetics.
AUTHOR(S): Corne, Jonathan (1); Djukanovic, Ratko; Thomas, Lynette; Warner, Jane; Botta, Luigi; Grandordy, Beatrice; Gygax, Daniel; Heusser, Christoph; Patalano, Francesco; Richardson, William; Kilchherr, Erich; Staehelin, Theophil; Davis, Frances; Gordon, Wayne; Sun, Lee; Liou, Ruey; Wang, Georg; Chang, Tse-Wen; Holgate, Stephen
CORPORATE SOURCE: (1) Univ. Med., Centre Block, Southampton General Hosp., Tremona Rd., Southampton SO16 6YD UK
SOURCE: Journal of Clinical Investigation, (1997) Vol. 99, No. 5, pp. 879-887.
ISSN: 0021-9738.
DOCUMENT TYPE: Article
LANGUAGE: English
AB CGP 51901 is a non-anaphylactogenic mouse/human chimeric anti-human IgE **antibody** that binds to free IgE and surface IgE of IgE-expressing B cells but not to IgE bound to high affinity IgE receptors (**Fc-epsilon-RI**) on **mast cells** and basophils or low affinity IgE receptors (Fc-epsilon-R2) on other cells. A phase 1 double-blind, placebo-controlled, single dose study with doses of 3, 10, 30, and 100 mg of CGP 51901 was conducted in 33 pollen-sensitive subjects who had raised levels of serum IgE and received either intravenous CGP 51901 or placebo. The administration of CGP 51901 was well tolerated and resulted in a decrease of serum free IgE levels in a dose-dependent manner, with suppression after 100 mg of CGP 51901 reaching gt 96%. Time of recovery to 50% of baseline IgE correlated with the dose of administered **antibody** and ranged from a mean of 1.3 d for the 3 mg to 39 d for the 100 mg dose. Total IgE, comprised of free and complexed IgE, increased as stored and newly synthesized IgE bound to CGP 51901. Complexed IgE was eliminated at a rate comparable with the terminal half-life of free CGP 51901 (11-13 d at all doses). Only one subject showed a weak **antibody** response against CGP 51901. We conclude that the use of anti-human IgE **antibody** is safe and effective in **reducing** serum IgE levels in atopic individuals and provides a potential therapeutic approach to the treatment of atopic diseases.

L8 ANSWER 13 OF 22 BIOSIS COPYRIGHT 1999 BIOSIS
ACCESSION NUMBER: 1996:108058 BIOSIS
DOCUMENT NUMBER: PREV199698680193
TITLE: Interleukin-10 **inhibits** cytokine generation from **mast cells**.
AUTHOR(S): Arock, Michel; Zuany-Amorim, Claudia; Singer, Monique; Benhamou, Marc; Pretolani, Marina (1)
CORPORATE SOURCE: (1) Unite Pharmacol. Cell., UA Inst. Pasteur/INSERM no. 285, rue du Dr. Roux, F-75015 Paris France
SOURCE: European Journal of Immunology, (1996) Vol. 26, No. 1, pp. 166-170.
ISSN: 0014-2980.
DOCUMENT TYPE: Article
LANGUAGE: English
AB This report examines the effect of recombinant murine interleukin-10 (rmIL-10) on antigen-induced beta-hexosaminidase, leukotriene (LT)C-4 and cytokine release from mouse bone marrow-derived **mast cells** (BMMC). BMMC sensitized to hapten-**monoclonal** IgE directed against dinitrophenol-bovine serum albumin (DNP-BSA) and challenged with 10 ng/ml DNP-BSA generated beta-hexosaminidase and LTC-4-like material, which was followed by tumor necrosis factor-alpha (TNF-alpha) and granulocyte-macrophage colony-stimulating factor (GMCSF) mRNA expression and protein release. Incubation of BMMC with 1-100 ng/ml rmIL- 10 **inhibited** cytokine generation, without affecting beta-hexosaminidase and LTC-4-like material release. TNF-alpha, but not GM-CSF mRNA expression, was also diminished in rmIL-10-treated BMMC, suggesting that down-regulation of cytokine production by rmIL-10 involves different mechanisms. These results identify a novel biological action of IL-10 as an **inhibitor** of cytokine production by stimulated **mast cells**.

L8 ANSWER 14 OF 22 EMBASE COPYRIGHT 1999 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 1998385337 EMBASE
TITLE: Endogenous superallergen protein Fv induces IL-4 secretion from human **Fc.epsilon. RI+** cells through interaction with the V(H)3 region of IgE.
AUTHOR: Patella V.; Giuliano A.; Bouvet J.-P.; Marone G.
CORPORATE SOURCE: Dr. G. Marone, Div. of Clinical Immunology/Allergy, University of Naples Federico II, Via S. Pansini 5, 80131 Napoli, Italy. marone@unina.it
SOURCE: Journal of Immunology, (15 Nov 1998) 161/10 (5647-5655).
Refs: 66
ISSN: 0022-1767 CODEN: JOIMA3

COUNTRY: United States
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 026 Immunology, Serology and Transplantation
LANGUAGE: English
SUMMARY LANGUAGE: English
AB We investigated the mechanism whereby protein Fv (pFv), a human sialoprotein found in normal liver and largely released in the intestinal tract in patients with viral hepatitis, induces mediator release from basophils and **mast cells** and evaluated whether it also induces IL-4 synthesis and secretion in basophils. pFv is a potent stimulus for histamine and IL-4 release from purified basophils. Histamine and IL-4 secretion from basophils activated by pFv was significantly correlated (r(s) = 0.70; p < 0.001). There was also a correlation (r(s) = 0.58; p < 0.01) between the maximum pFv- and anti-IgE-induced IL-4 release from basophils. The average t1/2 for pFv- induced histamine release was lower (3.5 .+-. 1.5 min) than for IL-4 release (79.5 .+-. 8.5 min; p < 0.01). IL-4 mRNA, constitutively present in basophils, was increased after stimulation by pFv and was **inhibited** by cyclosporin A and tacrolimus. Basophils from which IgE had been dissociated by brief exposure to lactic acid no longer released IL-4 in response to pFv and anti-IgE. The response to an mAb cross-linking the .alpha.-chain of **Fc.epsilon.RI** was unaffected by this treatment. Three human V(H)3+ **monoclonal IgM** concentration-dependently **inhibited** pFv-induced secretion of IL-4 and histamine from basophils and of histamine from human lung **mast cells**. In contrast, V(H)6+ **monoclonal IgM** did not **inhibit** the release of IL-4 and histamine induced by pFv. These results indicate that pFv, which acts as an endogenous superallergen, interacts with the V(H)3 domain of IgE to induce the synthesis and release of IL-4 from human **Fc.epsilon.RI**+ cells.

L8 ANSWER 15 OF 22 EMBASE COPYRIGHT 1999 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 1998307954 EMBASE
TITLE: Effects of mitogen-activated protein kinase kinase **inhibitor** PD 098059 on antigen challenge of guinea-pig airways in vitro.
AUTHOR: Tsang F.; Koh A.H.M.; Ting W.L.; Wong P.T.H.; Wong W.S.F.
CORPORATE SOURCE: W.S.F. Wong, Department of Pharmacology, Faculty of Medicine, National University of Singapore, 10 Kent Ridge Crescent, Singapore 119260, Singapore
SOURCE: British Journal of Pharmacology, (1998) 125/1 (61-68).
Refs: 48
ISSN: 0007-1188 CODEN: BJPCBM
COUNTRY: United Kingdom
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 015 Chest Diseases, Thoracic Surgery and Tuberculosis
030 Pharmacology
037 Drug Literature Index
LANGUAGE: English
SUMMARY LANGUAGE: English
AB 1. It has been shown that activation of protein tyrosine kinases is the earliest detectable signalling response to **Fc. epsilon.RI** cross-linking on **mast cell**. Following tyrosine kinase activation, a family of mitogen-activated protein kinases (MAPKs) was found to be activated as well. The present study examined the role of MAPK signalling cascade in in vitro model of **allergic** asthma using a specific MAPK kinase **inhibitor** PD 098059. 2. Guinea-pigs were passively sensitized with IgG **antibody** raised against ovalbumin (OA). Effects of PD 098059 on OA-induced anaphylactic contraction of isolated bronchi and release of histamine and peptidoleukotrienes from chopped lung preparations were studied. 3. PD 098059 (10-50 .mu.M) produced only minor **reduction** of maximal OA-induced bronchial contraction. In contrast, the rate of relaxation of OA-induced bronchial contraction was markedly faster in the presence of PD 098059 than the vehicle control in a concentration-dependent manner. 4. These observations corroborate well with the inability of PD 098059 (5-50 .mu.M) to substantially block the OA-induced release of histamine and with marked **inhibition** of OA-induced release of peptidoleukotrienes from lung fragments in the presence of PD 098059. Exogenous arachidonic acid-induced release of peptidoleukotrienes from lung fragments was not blocked by PD 098059. 5. In immunoblotting study, we found that p42(MAPK) was constitutively expressed in guinea-pig bronchi. However, treatment with OA, histamine or LTD4 did not cause activation of p42(MAPK). These findings together with the lack of **inhibitory** effects of PD 098059 on bronchial contraction induced by histamine or LTD4 suggest that histamine- and LTD4-induced bronchial contractions are not mediated by p42(MAPK) activation. 6. Taken together, our findings show that **inhibition** of MAPK signalling cascade by PD 098059 significantly **reduced** the OA-triggered release of peptidoleukotrienes leading to rapid relaxation of anaphylactic branchial contraction. On the other hand, p42(MAPK) did not play a role in histamine- or LTD4-induced bronchial smooth muscle contraction suggesting that PD 098059 exerts its **inhibitory** effects on OA-induced bronchial contraction primarily through **inhibition** of peptidoleukotrienes release from **mast cells**.

L8 ANSWER 16 OF 22 EMBASE COPYRIGHT 1999 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 1998138406 EMBASE
TITLE: Involvement of Bruton's tyrosine kinase in **Fc .epsilon.RI**-dependent **mast cell** degranulation and cytokine production.
AUTHOR: Hata D.; Kawakami Y.; Inagaki N.; Lantz C.S.; Kitamura T.; Khan W.N.; Maeda- Yamamoto M.; Miura T.; Han W.; Hartman S.E.; Yao L.; Nagai H.; Goldfeld A.E.; Alt F.W.; Gatli S.J.; Witte O.N.; Kawakami T.
CORPORATE SOURCE: T. Kawakami, La Jolla Inst. for Allergy/Immunol., 10355 Science Center Dr., San Diego, CA 92121, United States
SOURCE: Journal of Experimental Medicine, (20 Apr 1998) 187/8 (1235-1247).
Refs: 90
ISSN: 0022-1007 CODEN: JEMEAV
COUNTRY: United States
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 026 Immunology, Serology and Transplantation
LANGUAGE: English
SUMMARY LANGUAGE: English
AB We investigated the role of Bruton's tyrosine kinase (Btk) in **Fc.epsilon.RI**- dependent activation of mouse **mast cells**, using xid and btk null mutant mice. Unlike B cell development, **mast cell** development is apparently normal in these btk mutant mice. However, **mast cells** derived from these mice exhibited significant abnormalities in **Fc.epsilon. RI**-dependent function. xid mice primed with anti-dinitrophenyl **monoclonal** IgE **antibody** exhibited mildly diminished early- phase and severely blunted late-phase anaphylactic reactions in response to antigen challenge in vivo. Consistent with this finding, cultured **mast cells** derived from the bone marrow cells of xid or btk null mice exhibited mild impairments in degranulation, and more profound defects in the production of several cytokines, upon **Fc. epsilon.RI** cross-linking. Moreover, the transcriptional activities of these cytokine genes were severely **reduced** in **Fc.epsilon.RI** -stimulated btk mutant **mast cells**. The specificity of these effects of btk mutations was confirmed by the improvement in the ability of btk mutant **mast cells** to degranulate and to secrete cytokines after the retroviral transfer of wild- type btk cDNA, but not of vector or kinase-dead btk cDNA. Retroviral transfer of Emt (= Itk/Tsk), Btk's closest relative, also partially improved the ability of btk mutant **mast cells** to secrete mediators. Taken together, these results demonstrate an important role for Btk in the full expression of **Fc.epsilon.RI** signal transduction in **mast cells**.

L8 ANSWER 17 OF 22 EMBASE COPYRIGHT 1999 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 1998125329 EMBASE
TITLE: Specific **inhibition** of immunoglobulin E-mediated **allergic** reaction using antisense **Fc.epsilon.RI** .alpha. oligodeoxynucleotides.
AUTHOR: Kim H.-M.; Kim K.-S.; Lee E.-H.
CORPORATE SOURCE: Prof. H.-M. Kim, Department of Oriental Pharmacy, College of Pharmacy, Wonkwang University, Iksan, Chonbuk 570-749, Korea, Republic of
SOURCE: Immunology, (1998) 93/4 (589-594).
Refs: 27
ISSN: 0019-2805 CODEN: IMMUAM
COUNTRY: United Kingdom
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 022 Human Genetics
026 Immunology, Serology and Transplantation
037 Drug Literature Index
LANGUAGE: English
SUMMARY LANGUAGE: English
AB We have investigated the ability of an antisense immunoglobulin E (IgE) receptor .alpha.-subunit oligodeoxynucleotide (**Fc. epsilon.RI**.alpha. ODN) specifically to **inhibit** IgE-mediated **allergic** reactions in the mouse. Synthetic antisense **Fc.epsilon.RI** .alpha. ODN dose-dependently **inhibited** passive cutaneous anaphylaxis and histamine release from the mouse peritoneal **mast cells** (MPMC) activated by anti-dinitrophenyl (DNP) IgE. Northern blot analysis showed that the **mast cells** treated with antisense **Fc.epsilon. RI**.alpha. ODN exhibited no detectable levels of L-histidine decarboxylase mRNA after anti-DNP IgE stimulation, whereas the cells treated with sense **Fc.epsilon.RI** .alpha. ODN possessed significant amounts of this mRNA. Examination of the elevation of cAMP levels in MPMC following the activation with anti-DNP IgE demonstrated a significant rise in activated cells, but not in the antisense **Fc.epsilon. RI**.alpha. ODN-treated cells. Moreover, antisense **Fc .epsilon.RI**.alpha. ODN had a significant **inhibitory** effect on anti-DNP **IgE**- induced tumour necrosis factor-.alpha. production. Our results demonstrated that antisense **Fc.epsilon.RI**.alpha. ODN **inhibited** the IgE-mediated **allergic** reaction in vivo and in vitro.

L8 ANSWER 18 OF 22 EMBASE COPYRIGHT 1999 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 1998018076 EMBASE
TITLE: Identification of contact residues in the IgE binding site of human **Fc.epsilon. RI.alpha.**.
AUTHOR: Cook J.P.D.; Henry A.J.; McDonnell J.M.; Owens R.J.; Sutton B.J.; Gould H.J.
CORPORATE SOURCE: H.J. Gould, Randall Institute, King's College London, 26-29 Drury Lane, London WC2B 5RL, United Kingdom
SOURCE: Biochemistry, (1997) 36/50 (15579-15588).
Refs: 44
ISSN: 0006-2960 CODEN: BICHAW
COUNTRY: United States
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 026 Immunology, Serology and Transplantation
029 Clinical Biochemistry
LANGUAGE: English
SUMMARY LANGUAGE: English
AB The high-affinity receptor for immunoglobulin E (IgE), **Fc. epsilon.RI**, is an .alpha..beta..gamma.2 tetramer found on **mast cells**, basophils, and several other types of immune effector cells. The interaction of IgE with the .alpha.-subunit of **Fc.epsilon.RI** is central to the pathogenesis of **allergy**. Detailed knowledge of the mode of interaction of **Fc.epsilon .RI** with IgE may facilitate the development of **inhibitors** for general use in the treatment of

allergic disease. To this end we have performed site-directed mutagenesis on a soluble form of the Fc. epsilon.RI .alpha.-chain (sFc.epsilon.RI.alpha.). The effects of four mutations in the second immunoglobulin-like domain of sFc.epsilon.RI.alpha. upon the kinetics of binding to IgE and fragments of IgE have been analyzed using surface plasmon resonance. As described in the preceding paper of this issue [Henry, A. J., et al. (1997) Biochemistry 36, 15568-15578], biphasic binding kinetics was observed. Two of the mutations had significant effects on binding: K117D reduced the affinity of sFc.epsilon.RI.alpha. for IgE by a factor of 30, while D159K increased the affinity for IgE by a factor of 7, both principally through changes in the rates of dissociation of the slower phase of the interaction. Circular dichroism spectra of sFc.epsilon.RI.alpha. incorporating either of these mutations were indistinguishable from those of wild-type sFc.epsilon.RI.alpha., demonstrating that the native conformation had not been disrupted. Our results, together with those from site-directed mutagenesis on fragments of IgE presented in the accompanying paper, define the contact surfaces in the IgE:sFc.epsilon.RI.alpha. complex.

L8 ANSWER 19 OF 22 EMBASE COPYRIGHT 1999 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 97303666 EMBASE
TITLE: Urticaria, angioedema, and autoimmunity.
AUTHOR: Zuraw B.L.
CORPORATE SOURCE: Dr. B.L. Zuraw, Scripps Research Institute, 10550 North Torrey Pines Road, San Diego, CA 92037, United States
SOURCE: Clinics in Laboratory Medicine, (1997) 17/3 (559-569).
Refs: 63
ISSN: 0272-2712 CODEN: CLMED6
COUNTRY: United States
DOCUMENT TYPE: Journal
FILE SEGMENT: 011 Otorhinolaryngology
013 Dermatology and Venereology
026 Immunology, Serology and Transplantation
LANGUAGE: English
SUMMARY LANGUAGE: English
AB Until relatively recently, the pathophysiologic significance of the recognized associations between autoimmunity and swelling was largely unknown. It has now become clear that autoimmunity can play a critical role in the pathogenesis of chronic urticaria and acquired C1-INH deficiency with angioedema. Chronic urticaria has been associated with antithyroid autoantibodies, anti-IgE autoantibodies, and anti-Fc.epsilon.RI autoantibodies. The latter two autoantibodies are particularly interesting in that they have been shown to be capable of directly causing mast cell degranulation. It appears likely, therefore, that most cases of chronic urticaria will ultimately be considered an autoimmune disease rather than an allergic disease. The link between autoimmunity and the development of acquired C1-INH deficiency is also of interest. Recent studies suggest that the majority of acquired C1- INH deficiency patients have anti-C1-INH autoantibodies that appear to be responsible for the development of the C1-INH deficiency. In addition, both chronic urticaria and C1-INH deficiency can be associated with other autoimmune diseases, although the importance of these associations remains to be determined. Recognition of the role of autoantibodies in the pathogenesis of chronic urticaria and acquired C1-INH deficiency has altered the range of diagnostic and therapeutic approaches that need to be considered in approaching patients with chronic urticaria or acquired C1-INH deficiency. Future progress in understanding the genesis of these diseases may help elucidate the mechanism of autoantibody generation.

L8 ANSWER 20 OF 22 EMBASE COPYRIGHT 1999 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 96119699 EMBASE
TITLE: Protein tyrosine kinases in activation signal of human basophils through the immunoglobulin E receptor type I.
AUTHOR: Benhamou M.; Feuillard J.; Lortholary O.; Bourgeois C.; Michel L.; LeGoff L.; Michel A.; Mencia-Huerta J.-M.; Lejeune F.; Cassassus P.; Debre P.; Arock M.
CORPORATE SOURCE: CNRS URA 625, 91 Boulevard de l'Hopital, 75013 Paris,
France
SOURCE: Journal of Leukocyte Biology, (1996) 59/3 (461-470).
ISSN: 0741-5400 CODEN: JLBIE7
COUNTRY: United States
DOCUMENT TYPE: Journal
FILE SEGMENT: 025 Hematology
026 Immunology, Serology and Transplantation
LANGUAGE: English
SUMMARY LANGUAGE: English
AB Human basophils activated through high-ffinity immunoglobulin E (IgE) receptors (Fc.epsilon.RI) are involved in the late phase of the allergic reaction. To investigate the possible involvement of protein-trosine kinages in this activaion we used human acute basophilic leukemia (ABL) cells in culture as well as a pure population of normal basophils in vitro-derived from human bone marrow precursor cells (HBMB). ABL cells were 50-80% basophils at various stages of maturation as assessed by staining, morphology, ultrastructure, and flow cytometry analysis, and only bsasophils in ABL cells expressed Fc. epsilon.RI. Aggregation of Fc. epsilon.RI by IgE and anti-IgE, IgE and antigen, or anti-Fc.epsilon.RI monoclonal antibodies on ABL cells or on HBMB, led to increased tyrosine phosphorylation of 120-, 100-, 80-, 72-, 50- to 65., and 38-kDa substrates. Tyrosine phosphorylations in ABL cells were in baophils because 1) they were detected after a 5-s stimulation, 2) they were observed under conditions where mediator release is minimal, i.e., in the absence of extracellular calcium, 3) hapten addition during antigen stimulation resulted in almost total disappearance of tyrosine phosphorylations within 30 s. There was correlation between histamine release and tyrosine phosphorylation in anti-IgE dose-responses and in dose-responses of the tyrosine kinase inhibitor genistein. The tyrosine kinase p(72syk) was detected in the cells. Stimulation of ABL cells for 1 min resulted in extracellular calcium-independent tyrosine phosphorylation and activation of p(72syk). Therefore, tyrosine kinases are involved in the early steps of human Fc. epsilon.RI signaling in basophils. Tyrosine kinases and their substrates could represent new potential therapeutic targets to prevent the development of the allergic reaction.

L8 ANSWER 21 OF 22 EMBASE COPYRIGHT 1999 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 92337064 EMBASE
TITLE: IgE-mediated allergy and Fc.epsilon. receptor II.
AUTHOR: Suemura M.
CORPORATE SOURCE: Department of Medicine III, Osaka University Medical School, 1-1-50 Fukushima, Fukushima-ku, Osaka City 553, Japan
SOURCE: JPN. J. THORAC. DIS., (1992) 30/8 (1427-1433).
ISSN: 0301-1542 CODEN: NKYZA2
COUNTRY: Japan
DOCUMENT TYPE: Journal
FILE SEGMENT: 015 Chest Diseases, Thoracic Surgery and Tuberculosis
026 Immunology, Serology and Transplantation
029 Clinical Biochemistry
LANGUAGE: Japanese
SUMMARY LANGUAGE: Japanese; English
AB Two types of IgE receptors, Fc.epsilon. receptor I (Fc. epsilon.RI) and Fc.epsilon.RII), are known to be involved in IgE-mediated allergy. Fc. epsilon.RI is expressed on mast cells and basophils, and cross-linkage of Fc. epsilon.RI leads to the release of chemical mediators from these cells. Fc.epsilon. RI consists of .alpha., .beta. and .gamma. chains, and cDNAs encoding these chains were recently cloned. Fc.epsilon.RII is expressed on various cells such as mature .mu.+.delta.+ B cells and activated monocytes and eosinophils. The cDNA encoding B cell Fc.epsilon.RII was cloned by several groups including ours, and Fc.epsilon.RII was found to be a single chain receptor expressed with its N-terminal inside the cells, homologous to C-type animal lectins. Subsequently, we identified two species of Fc.epsilon.RII, Fc.epsilon.RIIa and Fc.epsilon.IIb, whose structures differ only at the N-terminal cytoplasmic region but share the same C-terminal extracellular region. These two receptors are generated utilizing different transcriptional initiation sites and 5' exons. Fc.epsilon.RIIa is constitutively expressed only on B cells. While Fc.epsilon.RIIb is inducible by IL-4 on B cells, monocytes and eosinophils. By employing transformants expressing Fc.epsilon.RIIa or Fc.epsilon.RIIb, it was demonstrated that Fc.epsilon.RIIa is involved in IgE-mediated endocytosis, whereas Fc.epsilon.RIIb functions in IgE-dependent phagocytosis. The C-terminal extracellular region of Fc.epsilon.RII is cleaved as a result of proteolysis, and released from cells as soluble Fc.epsilon.RII (sFc.epsilon.RII) with MW of 37, 33 and 25kDa. Since sFc.epsilon.RII secretion is regulated by IL-4 and IFNs, which are also responsible for the regulation of IgE antibody responses, sFc.epsilon.RII level in the serum may reflect the in vivo activities of these lymphokines. This possibility was assessed in various allergic diseases, following the clinical courses. It was found that serum sFc.epsilon.RII decreased following drug treatment or reduction of airborne allergens in parallel with clinical improvement, suggesting that sFc.epsilon.RII level in serum may be a good indicator of allergic disease. Then, in order to analyze the functions of sFc.epsilon.RII in allergy, we prepared recombinant sFc.epsilon.RII (25kDa). It showed an inhibitory effect on IgE-binding as well as IgE-mediated release of chemical mediators from cells expressing Fc.epsilon.RII or Fc.epsilon. RI. On the other hand, purified sFc.epsilon.RII (33kDa) exerted an enhancing effect on IL-4-induced IgE responses. Thus, sFc.epsilon.RII of different molecular sizes may function in various phases of IgE-mediated allergic reactions.

L8 ANSWER 22 OF 22 WPIDS COPYRIGHT 1999 DERWENT INFORMATION LTD
ACCESSION NUMBER: 97-448633 [41] WPIDS
DOC. NO. CPI: C97-143047
TITLE: Novel mimetope(s) for antibody BSW17 - useful for preparation of vaccines against IgE-mediated diseases, especially allergy

DERWENT CLASS: B04 D16
INVENTOR(S): KRICEK, F; STADLER, B
PATENT ASSIGNEE(S): (NOVS) NOVARTIS AG
COUNTRY COUNT: 75
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 9731948	A1	970904	(9741)*	EN	72

RW: AT BE CH DE DK EA ES FI FR GB GH GR IE IT KE LS LU MC MW NL
OA PT SD SE SZ UG
W: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI
GB GE HU IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG
MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK TJ TM TR TT UA
UG US UZ VN
AU 9718796 A 970916 (9803)

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9731948	A1	WO 97-EP1013	970228
AU 9718796	A	AU 97-18796	970228

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 9718796	A Based on	WO 9731948

PRIORITY APPLN. INFO: GB 96-17702 960822; GB 96-4412 960301
AB WO 9731948 A UPAB: 971013
A novel immunogenic molecule comprises: (i) at least one moiety of a BSW17 mimetope peptide; and (ii) a moiety capable of eliciting an immune response against the peptide. Also claimed is a ligand comprising an **antibody** domain specific for a BSW17 mimetope peptide moiety as above, where the **antibody** domain is also reactive with the IgE heavy chain amino acid sequence which comprises the natural epitope recognised by BSW17.
USE - The peptide is used in the preparation of vaccines against an IgE-mediated disease, especially **allergy** (claimed). The molecules can be used as vaccines for the generation of **antibodies** which **inhibit mast cell**/basophil triggering by blocking IgE/**Fc epsilon RI** alpha binding or IgE synthesis.
ADVANTAGE - The reaction to these mimetopes is safer as compared to the "classical vaccine" approach, as no IgE-derived protein fragments are present to generate cross-reactive **antibodies** in immunised patients.
Dwg.0/15

=> s basophil

18456 BASOPHIL

=> s l8 or basophil

L10 18464 L8 OR BASOPHIL

=> s l10 not l9

L11 8 L10 NOT L9

=> d l11 1-8 ibib ab

L11 ANSWER 1 OF 8 MEDLINE
ACCESSION NUMBER: 97477414 MEDLINE
DOCUMENT NUMBER: 97477414
TITLE: Negative regulation of **Fc epsilon RI**-mediated degranulation by CD81.
AUTHOR: Fleming T J; Donnadieu E; Song C H; Laethem F V; Galli S J; Kinet J P
CORPORATE SOURCE: Department of Pathology, Beth Israel Deaconess Medical Center, Boston, Massachusetts 02215, USA.
CONTRACT NUMBER: CA/AI-72074 (NCI)
AI/CA-23990 (NIAID)
GM-53950 (NIGMS)
SOURCE: JOURNAL OF EXPERIMENTAL MEDICINE, (1997 Oct 20) 186
(8) 1307-14.
Journal code: I2V. ISSN: 0022-1007.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals; Cancer Journals
ENTRY MONTH: 199801
ENTRY WEEK: 19980104
AB Signaling through the high affinity receptor for immunoglobulin E (**Fc epsilon RI**) results in the coordinate activation of tyrosine kinases before calcium mobilization. Receptors capable of interfering with the signaling of antigen receptors, such as **Fc epsilon RI**, recruit tyrosine and inositol phosphatases that results in diminished calcium mobilization. Here, we show that **antibodies** recognizing CD81 **inhibit Fc epsilon RI**-mediated **mast cell** degranulation but, surprisingly, without affecting aggregation-dependent tyrosine phosphorylation, calcium mobilization, or leukotriene synthesis. Furthermore, CD81 **antibodies** also **inhibit mast cell** degranulation in vivo as measured by **reduced** passive cutaneous anaphylaxis responses. These results reveal an unsuspected calcium-independent pathway of antigen receptor regulation, which is accessible to engagement by membrane proteins and on which novel therapeutic approaches to **allergic** diseases could be based.

L11 ANSWER 2 OF 8 MEDLINE
ACCESSION NUMBER: 96028104 MEDLINE
DOCUMENT NUMBER: 96028104
TITLE: Multiple defects in the immune system of Lyn-deficient mice, culminating in autoimmune disease.
AUTHOR: Hibbs M L; Tarlinton D M; Armes J; Grail D; Hodgson G; Maglitto R; Stacker S A; Dunn A R
CORPORATE SOURCE: Ludwig Institute for Cancer Research, Melbourne Tumour Biology Branch, Royal Melbourne Hospital, Victoria, Australia..
CONTRACT NUMBER: A1-03958
SOURCE: CELL, (1995 Oct 20) 83 (2) 301-11.
Journal code: CQ4. ISSN: 0092-8674.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals; Cancer Journals
ENTRY MONTH: 199602
AB Mice homozygous for a disruption at the Lyn locus display abnormalities associated with the B lymphocyte lineage and in **mast cell** function. Despite **reduced** numbers of recirculating B lymphocytes, Lyn-/- mice are immunoglobulin M (IgM) hyperglobulinemic. Immune responses to T-independent and T-dependent antigens are affected. Lyn-/- mice fail to mediate an **allergic** response to IgE cross-linking, indicating that activation of LYN plays an indispensable role in **Fc epsilon RI** signaling. Lyn-/- mice have circulating autoreactive **antibodies**, and many show severe glomerulonephritis caused by the deposition of IgG immune complexes in the kidney, a pathology reminiscent of systemic lupus erythematosus. Collectively, these results implicate LYN as having an indispensable role in immunoglobulin-mediated signaling, particularly in establishing B cell tolerance.

L11 ANSWER 3 OF 8 MEDLINE
ACCESSION NUMBER: 91114691 MEDLINE
DOCUMENT NUMBER: 91114691
TITLE: Mapping of the high affinity Fc epsilon receptor binding site to the third constant region domain of IgE.
AUTHOR: Nissim A; Jouvin M H; Eshhar Z
CORPORATE SOURCE: Department of Chemical Immunology, Weizmann Institute of Science, Rehovot, Israel.
SOURCE: EMBO JOURNAL, (1991 Jan) 10 (1) 101-7.
Journal code: EMB. ISSN: 0261-4189.
PUB. COUNTRY: ENGLAND: United Kingdom
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199105
AB Identification of the precise region(s) on the IgE molecule that take part in the binding of IgE to its high affinity receptor (**Fc epsilon RI**) may lead to the design of IgE analogues able to block the **allergic** response. To localize the **Fc epsilon RI**-binding domain of mouse IgE, we attempted to confer on human IgE, which normally does not bind to the rodent receptor, the ability to bind to the rat **Fc epsilon RI**. Employing exon shuffling, we have expressed chimeric epsilon-heavy chain genes composed of a mouse (4-hydroxy-3-nitrophenyl)acetic acid (NP)-binding VH domain, and human C epsilon in which various domains were replaced by their murine counterparts. This has enabled us to test the **Fc epsilon RI**-binding of each mouse IgE domain while maintaining the overall conformation of the molecule. All of the chimeric IgE molecules which contain the murine C epsilon 3, bound equally to both the rodent and human receptor, as well as to **monoclonal antibodies** recognizing a site on IgE which is identical or very close to the Fc **epsilon RI** binding site. Deletion of the second constant region domain did not impair either the binding capacity of the mutated IgE or its ability to mediate **mast cell** degradation. These results assign the third epsilon domain of IgE as the principal region involved in the interaction with the **Fc epsilon RI**.

L11 ANSWER 4 OF 8 BIOSIS COPYRIGHT 1999 BIOSIS
ACCESSION NUMBER: 1996:108058 BIOSIS
DOCUMENT NUMBER: PREV199698680193
TITLE: Interleukin-10 **inhibits** cytokine generation from **mast cells**.
AUTHOR(S): Arock, Michel; Zuany-Amorim, Claudia; Singer, Monique; Benhamou, Marc; Pretolani, Marina (1)
CORPORATE SOURCE: (1) Unite Pharmacol. Cell., UA Inst. Pasteur/INSERM no. 285, rue du Dr. Roux, F-75015 Paris France
SOURCE: European Journal of Immunology, (1996) Vol. 26, No. 1, pp. 166-170.
ISSN: 0014-2980.
DOCUMENT TYPE: Article
LANGUAGE: English
AB This report examines the effect of recombinant murine interleukin-10 (rmIL-10) on antigen-induced beta-hexosaminidase, leukotriene (LT)C-4 and cytokine release from mouse bone marrow-derived **mast cells** (BMMC). BMMC sensitized to hapten-**monoclonal** IgE directed against dinitrophenol-bovine serum albumin (DNP-BSA) and challenged with 10 ng/ml DNP-BSA generated beta-hexosaminidase and LTC-4-like material, which was followed by tumor necrosis factor-alpha (TNF-alpha) and granulocyte-macrophage colony-stimulating factor (GMCSF) mRNA expression and protein release. Incubation of BMMC with 1-100 ng/ml rmIL- 10 **inhibited** cytokine generation, without affecting beta-hexosaminidase and LTC-4-like material release. TNF-alpha, but not GM-CSF mRNA expression, was also diminished in rmIL-10-treated BMMC, suggesting that down-regulation of cytokine production by rmIL-10 involves different mechanisms. These results identify a novel biological action of IL-10 as an **inhibitor** of cytokine production by stimulated **mast cells**.

L11 ANSWER 5 OF 8 EMBASE COPYRIGHT 1999 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 1998307954 EMBASE
TITLE: Effects of mitogen-activated protein kinase kinase **inhibitor** PD 098059 on antigen challenge of guinea-pig airways in vitro.
AUTHOR: Tsang F.; Koh A.H.M.; Ting W.L.; Wong P.T.H.; Wong W.S.F.
CORPORATE SOURCE: W.S.F. Wong, Department of Pharmacology, Faculty of Medicine, National University of Singapore, 10 Kent Ridge Crescent, Singapore 119260, Singapore
SOURCE: British Journal of Pharmacology, (1998) 125/1 (61-68).
Refs: 48
ISSN: 0007-1188 CODEN: BJPCBM
COUNTRY: United Kingdom
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 015 Chest Diseases, Thoracic Surgery and Tuberculosis
030 Pharmacology
037 Drug Literature Index
LANGUAGE: English
SUMMARY LANGUAGE: English
AB 1. It has been shown that activation of protein tyrosine kinases is the earliest detectable signalling response to **Fc epsilon.RI** cross-linking on **mast cell**. Following tyrosine kinase activation, a family of mitogen-activated protein kinases (MAPKs) was found to be activated as well. The present study examined the role of MAPK signalling cascade in in vitro model of **allergic** asthma using a specific MAPK kinase **inhibitor** PD 098059. 2. Guinea-pigs were passively sensitized with IgG **antibody** raised against ovalbumin (OA). Effects of PD 098059 on OA-induced anaphylactic contraction of isolated bronchi and release of histamine and peptidoleukotrienes from chopped lung preparations were studied. 3.

PD 098059 (10-50 .mu.M) produced only minor **reduction** of maximal OA-induced bronchial contraction. In contrast, the rate of relaxation of OA-induced bronchial contraction was markedly faster in the presence of PD 098059 than the vehicle control in a concentration-dependent manner. 4. These observations corroborate well with the inability of PD 098059 (5-50 .mu.M) to substantially block the OA-induced release of histamine and with marked **inhibition** of OA-induced release of peptidoleukotrienes from lung fragments in the presence of PD 098059. Exogenous arachidonic acid-induced release of peptidoleukotrienes from lung fragments was not blocked by PD 098059. 5. In immunoblotting study, we found that p42(MAPK) was constitutively expressed in guinea-pig bronchi. However, treatment with OA, histamine or LTD4 did not cause activation of p42(MAPK). These findings together with the lack of **inhibitory** effects of PD 098059 on bronchial contraction induced by histamine or LTD4 suggest that histamine- and LTD4-induced bronchial contractions are not mediated by p42(MAPK) activation. 6. Taken together, our findings show that **inhibition** of MAPK signalling cascade by PD 098059 significantly **reduced** the OA-triggered release of peptidoleukotrienes leading to rapid relaxation of anaphylactic branchial contraction. On the other hand, p42(MAPK) did not play a role in histamine- or LTD4-induced bronchial smooth muscle contraction suggesting that PD 098059 exerts its **inhibitory** effects on OA-induced bronchial contraction primarily through **inhibition** of peptidoleukotrienes release from **mast cells**.

L11 ANSWER 6 OF 8 EMBASE COPYRIGHT 1999 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 1998138406 EMBASE
TITLE: Involvement of Bruton's tyrosine kinase in **Fc .epsilon.RI**-dependent **mast cell** degranulation and cytokine production.
AUTHOR: Hata D.; Kawakami Y.; Inagaki N.; Lantz C.S.; Kitamura T.; Khan W.N.; Maeda- Yamamoto M.; Miura T.; Han W.; Hartman S.E.; Yao L.; Nagai H.; Goldfeld A.E.; Alt F.W.; Gatli S.J.; Witte O.N.; Kawakami T.
CORPORATE SOURCE: T. Kawakami, La Jolla Inst. for Allergy/Immunol., 10355 Science Center Dr., San Diego, CA 92121, United States
SOURCE: Journal of Experimental Medicine, (20 Apr 1998) 187/8 (1235-1247).
Refs: 90
ISSN: 0022-1007 CODEN: JEMEAV
COUNTRY: United States
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 026 Immunology, Serology and Transplantation
LANGUAGE: English
SUMMARY LANGUAGE: English
AB We investigated the role of Bruton's tyrosine kinase (Btk) in **Fc.epsilon.RI**- dependent activation of mouse **mast cells**, using xid and btk null mutant mice. Unlike B cell development, **mast cell** development is apparently normal in these btk mutant mice. However, **mast cells** derived from these mice exhibited significant abnormalities in **Fc.epsilon. RI**-dependent function. xid mice primed with anti-dinitrophenyl **monoclonal** IgE **antibody** exhibited mildly diminished early- phase and severely blunted late-phase anaphylactic reactions in response to antigen challenge in vivo. Consistent with this finding, cultured **mast cells** derived from the bone marrow cells of xid or btk null mice exhibited mild impairments in degranulation, and more profound defects in the production of several cytokines, upon **Fc. epsilon.RI** cross-linking. Moreover, the transcriptional activities of these cytokine genes were severely **reduced** in **Fc.epsilon.RI** -stimulated btk mutant **mast cells**. The specificity of these effects of btk mutations was confirmed by the improvement in the ability of btk mutant **mast cells** to degranulate and to secrete cytokines after the retroviral transfer of wild- type btk cDNA, but not of vector or kinase-dead btk cDNA. Retroviral transfer of Emt (= Itk/Tsk), Btk's closest relative, also partially improved the ability of btk mutant **mast cells** to secrete mediators. Taken together, these results demonstrate an important role for Btk in the full expression of **Fc.epsilon.RI** signal transduction in **mast cells**.

L11 ANSWER 7 OF 8 EMBASE COPYRIGHT 1999 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 1998125329 EMBASE
TITLE: Specific **inhibition** of immunoglobulin E-mediated **allergic** reaction using antisense **Fc.epsilon.RI** .alpha. oligodeoxynucleotides.
AUTHOR: Kim H.-M.; Kim K.-S.; Lee E.-H.
CORPORATE SOURCE: Prof. H.-M. Kim, Department of Oriental Pharmacy, College of Pharmacy, Wonkwang University, Iksan, Chonbuk 570-749, Korea, Republic of
SOURCE: Immunology, (1998) 93/4 (589-594).
Refs: 27
ISSN: 0019-2805 CODEN: IMMUAM
COUNTRY: United Kingdom
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 022 Human Genetics
026 Immunology, Serology and Transplantation
037 Drug Literature Index
LANGUAGE: English
SUMMARY LANGUAGE: English
AB We have investigated the ability of an antisense immunoglobulin E (IgE) receptor .alpha.-subunit oligodeoxynucleotide (**Fc. epsilon.RI**.alpha. ODN) specifically to **inhibit** IgE-mediated **allergic** reactions in the mouse. Synthetic antisense **Fc.epsilon.RI** .alpha. ODN dose-dependently **inhibited** passive cutaneous anaphylaxis and histamine release from the mouse peritoneal **mast cells** (MPMC) activated by anti-dinitrophenyl (DNP) IgE. Northern blot analysis showed that the **mast cells** treated with antisense **Fc.epsilon. RI**.alpha. ODN exhibited no detectable levels of L-histidine decarboxylase mRNA after anti-DNP IgE stimulation, whereas the cells treated with sense **Fc.epsilon.RI** .alpha. ODN possessed significant amounts of this mRNA. Examination of the elevation of cAMP levels in MPMC following the activation with anti-DNP IgE demonstrated a significant rise in activated cells, but not in the antisense **Fc.epsilon. RI**.alpha. ODN-treated cells. Moreover, antisense **Fc .epsilon.RI**.alpha. ODN had a significant **inhibitory** effect on anti-DNP IgE- induced tumour necrosis factor-.alpha. production. Our results demonstrated that antisense **Fc.epsilon.RI**.alpha. ODN **inhibited** the IgE-mediated **allergic** reaction in vivo and in vitro.

L11 ANSWER 8 OF 8 EMBASE COPYRIGHT 1999 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 97303666 EMBASE
TITLE: Urticaria, angioedema, and autoimmunity.
AUTHOR: Zuraw B.L.
CORPORATE SOURCE: Dr. B.L. Zuraw, Scripps Research Institute, 10550 North Torrey Pines Road, San Diego, CA 92037, United States
SOURCE: Clinics in Laboratory Medicine, (1997) 17/3 (559-569).
Refs: 63
ISSN: 0272-2712 CODEN: CLMED6
COUNTRY: United States
DOCUMENT TYPE: Journal
FILE SEGMENT: 011 Otorhinolaryngology
013 Dermatology and Venereology
026 Immunology, Serology and Transplantation
LANGUAGE: English
SUMMARY LANGUAGE: English
AB Until relatively recently, the pathophysiologic significance of the recognized associations between autoimmunity and swelling was largely unknown. It has now become clear that autoimmunity can play a critical role in the pathogenesis of chronic urticaria and acquired C1-INH deficiency with angioedema. Chronic urticaria has been associated with antithyroid autoantibodies, anti-IgE autoantibodies, and anti-**Fc.epsilon.RI** autoantibodies. The latter two autoantibodies are particularly interesting in that they have been shown to be capable of directly causing **mast cell** degranulation. It appears likely, therefore, that most cases of chronic urticaria will ultimately be considered an autoimmune disease rather than an **allergic** disease. The link between autoimmunity and the development of acquired C1-INH deficiency is also of interest. Recent studies suggest that the majority of acquired C1- INH deficiency patients have anti-C1-INH autoantibodies that appear to be responsible for the development of the C1-INH deficiency. In addition, both chronic urticaria and C1-INH deficiency can be associated with other autoimmune diseases, although the importance of these associations remains to be determined. Recognition of the role of autoantibodies in the pathogenesis of chronic urticaria and acquired C1-INH deficiency has altered the range of diagnostic and therapeutic approaches that need to be considered in approaching patients with chronic urticaria or acquired C1-INH deficiency. Future progress in understanding the genesis of these diseases may help elucidate the mechanism of autoantibody generation.

=> s (l2 or basophil) and l3 and (antibod? or monoclon? or chimeric(w)antibod? or chimeric(w)monoclon?) and allerg? and (inhib? or reduc? or ameliorat? or compet?)

L12 145 (L2 OR BASOPHIL) AND L3 AND (ANTIBOD? OR MONOCLON? OR CHIMERIC(W) ANTIBOD? OR CHIMERIC(W) MONOCLON?) AND ALLERG? AND (INHIB? OR REDUC? OR AMELIORAT? OR COMPET?)

=> dup rem

ENTER L# LIST OR (END):l12

PROCESSING COMPLETED FOR L12
L13 76 DUP REM L12 (69 DUPLICATES REMOVED)

=> d l13 1-76 ibib ab

L13 ANSWER 1 OF 76 EMBASE COPYRIGHT 1999 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 1998385337 EMBASE
TITLE: Endogenous superallergen protein Fv induces IL-4 secretion from human **Fc.epsilon** .RI+ cells through interaction with the V(H)3 region of IgE.
AUTHOR: Patella V.; Giuliano A.; Bouvet J.-P.; Marone G.
CORPORATE SOURCE: Dr. G. Marone, Div. of Clinical Immunology/Allergy, University of Naples Federico II, Via S. Pansini 5, 80131 Napoli, Italy. marone@unina.it
SOURCE: Journal of Immunology, (15 Nov 1998) 161/10 (5647-5655).
Refs: 66
ISSN: 0022-1767 CODEN: JOIMA3
COUNTRY: United States
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 026 Immunology, Serology and Transplantation
LANGUAGE: English
SUMMARY LANGUAGE: English
AB We investigated the mechanism whereby protein Fv (pFv), a human sialoprotein found in normal liver and largely released in the intestinal tract in patients with viral hepatitis, induces mediator release from **basophils** and **mast cells** and evaluated whether it also induces IL-4 synthesis and secretion in **basophils**. pFv is a potent stimulus for histamine and IL-4 release from purified **basophils**. Histamine and IL-4 secretion from **basophils** activated by pFv was significantly correlated (r(s) = 0.70; p < 0.001). There was also a correlation (r(s) = 0.58; p < 0.01) between the maximum pFv- and anti-IgE-induced IL-4 release from **basophils**. The average t1/2 for pFv- induced histamine release was lower (3.5 .+-. 1.5 min) than for IL-4 release (79.5 .+-. 8.5 min; p < 0.01). IL-4 mRNA, constitutively present in **basophils**, was increased after

stimulation by pFv and was **inhibited** by cyclosporin A and tacrolimus. **Basophils** from which IgE had been dissociated by brief exposure to lactic acid no longer released IL-4 in response to pFv and anti-IgE. The response to an mAb cross-linking the .alpha.-chain of **Fc.epsilon.**RI was unaffected by this treatment. Three human V(H)3+ **monoclonal** IgM concentration-dependently **inhibited** pFv-induced secretion of IL-4 and histamine from **basophils** and of histamine from human lung **mast cells**. In contrast, V(H)6+ **monoclonal** IgM did not **inhibit** the release of IL-4 and histamine induced by pFv. These results indicate that pFv, which acts as an endogenous superallergen, interacts with the V(H)3 domain of IgE to induce the synthesis and release of IL-4 from human **Fc.epsilon.**RI+ cells.

L13 ANSWER 2 OF 76 EMBASE COPYRIGHT 1999 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 1998138406 EMBASE
TITLE: Involvement of Bruton's tyrosine kinase in **Fc .epsilon.**RI-dependent **mast cell** degranulation and cytokine production.
AUTHOR: Hata D.; Kawakami Y.; Inagaki N.; Lantz C.S.; Kitamura T.; Khan W.N.; Maeda- Yamamoto M.; Miura T.; Han W.; Hartman S.E.; Yao L.; Nagai H.; Goldfeld A.E.; Alt F.W.; Gatli S.J.; Witte O.N.; Kawakami T.
CORPORATE SOURCE: T. Kawakami, La Jolla Inst. for Allergy/Immunol., 10355 Science Center Dr., San Diego, CA 92121, United States
SOURCE: Journal of Experimental Medicine, (20 Apr 1998) 187/8 (1235-1247).
Refs: 90
ISSN: 0022-1007 CODEN: JEMEAV
COUNTRY: United States
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 026 Immunology, Serology and Transplantation
LANGUAGE: English
SUMMARY LANGUAGE: English
AB We investigated the role of Bruton's tyrosine kinase (Btk) in **Fc.epsilon.**RI- dependent activation of mouse **mast cells**, using xid and btk null mutant mice. Unlike B cell development, **mast cell** development is apparently normal in these btk mutant mice. However, **mast cells** derived from these mice exhibited significant abnormalities in **Fc.epsilon.**RI-dependent function. xid mice primed with anti-dinitrophenyl **monoclonal** IgE **antibody** exhibited mildly diminished early- phase and severely blunted late-phase anaphylactic reactions in response to antigen challenge in vivo. Consistent with this finding, cultured **mast cells** derived from the bone marrow cells of xid or btk null mice exhibited mild impairments in degranulation, and more profound defects in the production of several cytokines, upon **Fc.epsilon.**RI cross-linking. Moreover, the transcriptional activities of these cytokine genes were severely **reduced** in **Fc.epsilon.**RI-stimulated btk mutant **mast cells**. The specificity of these effects of btk mutations was confirmed by the improvement in the ability of btk mutant **mast cells** to degranulate and to secrete cytokines after the retroviral transfer of wild- type btk cDNA, but not of vector or kinase-dead btk cDNA. Retroviral transfer of Emt (= Itk/Tsk), Btk's closest relative, also partially improved the ability of btk mutant **mast cells** to secrete mediators. Taken together, these results demonstrate an important role for Btk in the full expression of **Fc. epsilon.**RI signal transduction in **mast cells**.

L13 ANSWER 3 OF 76 EMBASE COPYRIGHT 1999 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 1998125329 EMBASE
TITLE: Specific **inhibition** of immunoglobulin E-mediated **allergic** reaction using antisense **Fc.epsilon.**RI.alpha. oligodeoxynucleotides.
AUTHOR: Kim H.-M.; Kim K.-S.; Lee E.-H.
CORPORATE SOURCE: Prof. H.-M. Kim, Department of Oriental Pharmacy, College of Pharmacy, Wonkwang University, Iksan, Chonbuk 570-749, Korea, Republic of
SOURCE: Immunology, (1998) 93/4 (589-594).
Refs: 27
ISSN: 0019-2805 CODEN: IMMUAM
COUNTRY: United Kingdom
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 022 Human Genetics
026 Immunology, Serology and Transplantation
037 Drug Literature Index
LANGUAGE: English
SUMMARY LANGUAGE: English
AB We have investigated the ability of an antisense immunoglobulin E (**IgE) receptor** .alpha.-subunit oligodeoxynucleotide (**Fc.epsilon.**RI.alpha. ODN) specifically to **inhibit** IgE-mediated **allergic** reactions in the mouse. Synthetic antisense **Fc.epsilon.**RI.alpha. ODN dose-dependently **inhibited** passive cutaneous anaphylaxis and histamine release from the mouse peritoneal **mast cells** (MPMC) activated by anti-dinitrophenyl (DNP) IgE. Northern blot analysis showed that the **mast cells** treated with antisense **Fc.epsilon** .RI.alpha. ODN exhibited no detectable levels of L-histidine decarboxylase mRNA after anti-DNP IgE stimulation, whereas the cells treated with sense **Fc.epsilon.**RI.alpha. ODN possessed significant amounts of this mRNA. Examination of the elevation of cAMP levels in MPMC following the activation with anti-DNP IgE demonstrated a significant rise in activated cells, but not in the antisense **Fc.epsilon.**RI.alpha. ODN-treated cells. Moreover, antisense **Fc.epsilon** .RI.alpha. ODN had a significant **inhibitory** effect on anti-DNP IgE- induced tumour necrosis factor-.alpha. production. Our results demonstrated that antisense **Fc.epsilon** .RI.alpha. ODN **inhibited** the IgE-mediated **allergic** reaction in vivo and in vitro.

L13 ANSWER 4 OF 76 MEDLINE DUPLICATE 1
ACCESSION NUMBER: 1998224476 MEDLINE
DOCUMENT NUMBER: 98224476
TITLE: Antagonistic peptides specifically **inhibit** proliferation, cytokine production, CD40L expression, and help for IgE synthesis by Der p 1-specific human T-cell clones.
AUTHOR: Fasler S; Aversa G; de Vries J E; Yssel H
CORPORATE SOURCE: Human Immunology Department, DNAX Research Institute for Molecular and Cellular Biology, Palo Alto, Calif, USA.
SOURCE: JOURNAL OF ALLERGY AND CLINICAL IMMUNOLOGY, (1998 Apr) 101 (4 Pt 1) 521-30.
Journal code: H53. ISSN: 0091-6749.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals
ENTRY MONTH: 199807
ENTRY WEEK: 19980702
AB BACKGROUND: **Allergic** disorders are characterized by IgE **antibody** responses to a multitude of **allergens** as a result of the ability of these **antibodies** to specifically bind to high-affinity **IgE receptors** on **mast cells** and **basophils**. This interaction results in receptor activation and release of soluble mediators such as histamine and leukotrienes, which cause **allergic** reactions in various target organs. Because the synthesis of IgE is tightly regulated by cytokines and CD40 ligand (L) interactions, CD4+ helper T cells are obvious targets, with the aim to modulate **allergen**-induced IgE responses. OBJECTIVES: Because of the central role of **allergen** -specific T-helper type 2 (TH2) cells in the pathway leading to IgE synthesis in vitro and in vivo, we have evaluated the possibility of **inhibiting allergen**-induced activation of these cells by using **allergen**-derived peptides that have been modified by single amino acid substitutions. METHODS: Three cloned human TH2-like CD4+ T-cell lines, specific for Der p 1, the major **allergen** in house dust, were used in this study. Upon activation with Der p 1 or specific Der p 1-derived wild-type peptides, these T-cell clones produce high levels of IL-4 and IL-5 and low levels of interferon-gamma and IL-2, respectively, and furthermore give help to B cells for the production of IgE in vitro. Modified synthetic peptides were generated by the introduction of single amino acid substitutions into two different T-cell activation-inducing epitopes on Der p 1. The effects of these modified peptides were studied in Der p 1-induced proliferation, cytokine production, and in vitro IgE production assays. RESULTS: Several substituted Der p 1-derived peptides failed to induce T-cell proliferation, in contrast to the native peptides. In addition, some of these peptides acted as antagonists by strongly **inhibiting** wild-type peptide-induced proliferation as well as the production of interferon-gamma, IL-2, IL-4, and IL-5, although the production of the latter two cytokines was less affected than that of interferon-gamma, even at a 100-fold molar excess of the antagonistic peptides. In addition, the presence of an excess of each of the antagonistic peptides during the activation of Der p I-specific T-cell clones prevented induction of CD40L expression, resulting in a failure of these cells to give help to B cells for the production of IgE in vitro, even in the presence of exogenous IL-4. CONCLUSIONS: Substitution of certain amino acid residues in immunogenic Der p 1-derived peptides results in the generation of peptides that fail to induce proliferation of Der p 1-specific T-cell clones. In addition, these modified peptides have strong antagonistic activities on Der p 1-induced proliferation, cytokine production, and CD40L expression by **allergen** -specific T-cell clones as well as on T cell-mediated IgE production by B cells. These findings suggest that modified peptides interfere with **allergen**-induced activation of T cells, including the production of cytokines and the expression of surface molecules important for successful T cell-B cell interactions, and may therefore have therapeutic potential by **inhibiting** the expansion and function of **allergen**-specific TH2 cells.

L13 ANSWER 5 OF 76 BIOSIS COPYRIGHT 1999 BIOSIS
ACCESSION NUMBER: 1998:257635 BIOSIS
DOCUMENT NUMBER: PREV199800257635
TITLE: Antagonistic peptides specifically **inhibit** proliferation, cytokine production, CD40L expression, and help for IgE synthesis by Der p 1-specific human T-cell clones.
AUTHOR(S): Fasler, Stephan; Aversa, Gregoria; De Vries, Jan E.; Yssel, Hans (1)
CORPORATE SOURCE: (1) INSERM U454, Hopital Arnaud de Villeneuve, 371 Ave. Doyen Gaston Giraud, 34295 Montpellier Cedex France
SOURCE: Journal of Allergy and Clinical Immunology, (April, 1998) Vol. 10, No. 4 PART 1, pp. 521-530.
ISSN: 0091-6749.
DOCUMENT TYPE: Article
LANGUAGE: English
AB Background: **Allergic** disorders are characterized by IgE **antibody** responses to a multitude of **allergens** as a result of the ability of these **antibodies** to specifically bind to high-affinity **IgE receptors** on **mast cells** and **basophils**. This interaction results in receptor activation and release of soluble mediators such as histamine and leukotrienes, which cause **allergic** reactions in various target organs. Because the synthesis of IgE is tightly regulated by cytokines and CD40 ligand (L) interactions, CD4+ helper T cells are obvious targets, with the aim to modulate **allergen**-induced IgE responses. Objectives: Because of the central role of **allergen** -specific T-helper type 2 (TH2) cells in the pathway leading to IgE synthesis in vitro and in vivo, we have evaluated the possibility of **inhibiting allergen**-induced activation of these cells by using **allergen**-derived peptides that have been modified by single amino acid substitutions. Methods: Three cloned human TH2-like CD4+ T-cell lines, specific for Der p 1, the major **allergen** in house dust, were used in this study. Upon

activation with Der p 1 or specific Der p 1-derived wild-type peptides, these T-cell clones produce high levels of IL-4 and IL-5 and low levels of interferon-gamma and IL-2, respectively, and furthermore give help to B cells for the production of IgE in vitro. Modified synthetic peptides were generated by the introduction of single amino acid substitutions into two different T-cell activation-inducing epitopes on Der p 1. The effects of these modified peptides were studied in Der p 1-induced proliferation, cytokine production, and in vitro IgE production assays. Results: Several substituted Der p 1-derived peptides failed to induce T-cell proliferation, in contrast to the native peptides. In addition, some of these peptides acted as antagonists by strongly **inhibiting** wild-type peptide-induced proliferation as well as the production of interferon-gamma, IL-2, IL-4, and IL-5, although the production of the latter two cytokines was less affected than that of interferon-gamma, even at a 100-fold molar excess of the antagonistic peptides. In addition, the presence of an excess of each of the antagonistic peptides during the activation of Der p I-specific T-cell clones prevented induction of CD40L expression, resulting in a failure of these cells to give help to B cells for the production of IgE in vitro, even in the presence of exogenous IL-4. Conclusions: Substitution of certain amino acid residues in immunogenic Der p 1-derived peptides results in the generation of peptides that fail to induce proliferation of Der p -specific T-cell clones. In addition, these modified peptides have strong antagonistic activities on Der p 1-induced proliferation, cytokine production, and CD40L expression by **allergen** -specific T-cell clones as well as on T cell-mediated IgE production by B cells. These findings suggest that modified peptides interfere with **allergen**-induced activation of T cells, including the production of cytokines and the expression of surface molecules important for successful T cell-B cell interactions, and may therefore have therapeutic potential by **inhibiting** the expansion and function of **allergen**-specific TH2 cells.

L13 ANSWER 6 OF 76 EMBASE COPYRIGHT 1999 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 1998240544 EMBASE
TITLE: HrHRF: Function and regulation.
AUTHOR: Escura R.B.; Schroeder J.T.; MacDonald S.M.
CORPORATE SOURCE: Dr. R.B. Escura, Johns Hopkins Asthma/Allergy Ctr., 5501 Hopkins Bayview Circle, Baltimore, MD 21224, United States
SOURCE: Drug News and Perspectives, (1998) 11/4 (223-229). Refs: 51
ISSN: 0214-0934 CODEN: DNPEED
COUNTRY: Spain
DOCUMENT TYPE: Journal; General Review
FILE SEGMENT: 026 Immunology, Serology and Transplantation
030 Pharmacology
037 Drug Literature Index
LANGUAGE: English
SUMMARY LANGUAGE: English
Since **basophils** appear to play a fundamental role in the maintenance of **allergic** inflammation, the factors involved in **basophil** activation have become a focus of investigation in many laboratories. From this interest, the field of histamine-releasing factors (HRFs) has evolved. Our laboratory reported that a factor was present in late-phase skin blister fluids that caused **basophil** histamine release. It was hypothesized that **basophil** degranulation in these donors was mediated by the interaction of these HRFs with a certain kind of IgE, and upon experimentation a functional heterogeneity of the IgE molecule was uncovered. We designated the IgE from HRF responders as IgE+; the remaining IgE molecules designated were IgE-. Initially, it was thought that HrHRF might exert its activity by directly interacting with IgE+; however, a number of recent experiments have questioned this hypothesis. Observations suggest, in part, that HrHRF mediates biological activities on inflammatory cells by binding to a specific receptor rather than to the IgE molecule and/or the Fc.epsilon.RI. In parallel with the search for an HrHRF receptor, a number of experiments have been performed to determine whether mediator release by this protein proceeds via a signal transduction pathway other than the one triggered by classic IgE-dependent stimuli such as anti-IgE **antibody** or antigen. Although further characterization is ongoing, the evidence thus far is consistent with the concept that HRF may be an important regulator of the cellular inflammation involved in the pathophysiology of **allergy**.

L13 ANSWER 7 OF 76 MEDLINE DUPLICATE 2
ACCESSION NUMBER: 1998160391 MEDLINE
DOCUMENT NUMBER: 98160391
TITLE: Relationship between helminthic infection and IgE response in atopic and nonatopic children in a tropical environment.
AUTHOR: Lynch N R; Hagel I A; Palenque M E; Di Prisco M C; Escudero J E; Corao L A; Sandia J A; Ferreira L J; Botto C; Perez M; Le Souef P N
CORPORATE SOURCE: Instituto de Biomedicina, Universidad Central de Venezuela, Caracas.
SOURCE: JOURNAL OF ALLERGY AND CLINICAL IMMUNOLOGY, (1998 Feb) 101 (2 Pt 1) 217-21.
Journal code: H53. ISSN: 0091-6749.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals
ENTRY MONTH: 199805
ENTRY WEEK: 19980504
AB BACKGROUND: Although IgE **antibody** is clearly involved in **allergic** reactions to environmental **allergens**, this immunoglobulin is an important component of host-protective immune responses against the helminthic parasites that are endemic in the majority of the world population. However, these infections not only stimulate the production of antiparasite IgE **antibody** but can nonspecifically induce polyclonal IgE synthesis that results in highly elevated total serum IgE levels. Such polyclonal stimulation can diminish specific IgE **antibody** responses and cause saturation of **mast cell Fc epsilon** receptors, thus **inhibiting allergic** reactivity. This may represent a mechanism of immune evasion by the parasite. OBJECTIVE: Because an atopic disposition is generally recognized to be associated with elevated IgE synthesis against environmental **allergens**, the aim of this study was to evaluate the influence of atopy on the antiparasite response. To this end, we examined two groups of Venezuelan children in whom the intestinal helminth Ascaris lumbricoides is endemic but that differ greatly in their level of atopy. One group was from an island population (Coche Island) that has a very strong atopic background and in which the prevalence of **allergic** disease is extremely high. The other was a group of nonatopic children belonging to a mainland population (Barrio Los Erasos) that is of comparable socioeconomic level and has an exposure to helminthic infection similar to that of the island group but a relatively low expression of **allergic** diseases. RESULTS: Although the living conditions and the prevalence of Ascaris infection of the two groups were comparable, the intensity of the parasitic infection was considerably higher in the nonatopic mainland children (geometric mean values of eggs per gram of feces: Barrio Los Erasos, 7621; Coche Island, 1435; $p < 0.001$). In addition, their total serum IgE levels were significantly more elevated than in the atopic island group (geometric mean: Barrio Los Erasos, 2172; Coche Island, 941 IU/ml; $p < 0.001$). In contrast, the specific anti-Ascaris response was much stronger in the atopic children (geometric mean: Barrio Los Erasos, 0.30; Coche Island, 0.91 PRU/ml; $p < 0.001$), which resulted in the ratio of specific to total IgE being nine times higher than in the nonatopic mainland subjects. These differences were maintained even when the children were matched on the basis of infection intensity, thus indicating that the atopic children have an intrinsic propensity to favor specific over polyclonal IgE responses to the parasite. CONCLUSIONS: The children with a strong atopic background demonstrated IgE responses concordant with an enhanced protective response against helminthic parasites and had significantly lower intensities of infection than their nonatopic counterparts. These observations support the concept that the atopic state has conferred a selective evolutionary advantage that could compensate for its involvement in **allergic** disease.

L13 ANSWER 8 OF 76 MEDLINE DUPLICATE 3
ACCESSION NUMBER: 1998189648 MEDLINE
DOCUMENT NUMBER: 98189648
TITLE: Alternative G1m, G2m and G3m allotypes of IGHG genes correlate with atopic and nonatopic pathways of immune regulation in children with bronchial asthma.
AUTHOR: Oxelius V A; Carlsson A M; Autivillius M
CORPORATE SOURCE: Department of Pediatrics and Clinical Immunology, University Hospital, University of Lund, Sweden.
SOURCE: INTERNATIONAL ARCHIVES OF ALLERGY AND IMMUNOLOGY, (1998 Mar) 115 (3) 215-9.
Journal code: BJ7. ISSN: 1018-2438.
PUB. COUNTRY: Switzerland
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199806
ENTRY WEEK: 19980604
AB Most genetic studies of bronchial asthma deal with IgE responsiveness. The manner by which **allergens** trigger IgE production and activate **mast cells** suggests that several genetic loci may be involved. Several reports of candidate genes include chromosome 6 and HLA antigens, chromosome 14q11 and the alpha chain of the T cell receptor, chromosome 11q32 and the beta chain of the high-affinity **IgE receptor** and chromosome 5 and the gene cluster for IL-4, respectively. In addition, the immunoglobulin heavy chain G (IGHG) genes on chromosome 14q32 have been associated with both atopic and non atopic bronchial asthma in children. In order to further investigate the role of IGHG genes in asthmatic children, the phenotypes of patients with homozygous but alternative IGHG genes were investigated. IGHG gene expression of patients with childhood asthma was determined by serum Gm allotypes with a quantitative **competitive** indirect ELISA method. The groups consisted of 24 children with the homozygous G3m(b/b)-G1m(f/f)-G2m(n/n) and 16 with the alternative G3m(g/g)-G1m(a/a)-G2m(-n/-n) genes. The two different genotypes were investigated for serum IgE (PRIST), serum IgG subclass levels (radial immunodiffusion), Gm allotype levels (**competitive** ELISA), IgA and IgM levels (radial immunodiffusion), peripheral blood eosinophils, specific IgE **antibodies** (skin prick test, SPT, or radioallergosorbent test, RAST), number of peripheral blood CD lymphocyte markers (flow cytometry) and serum IL-4 and IFN-gamma levels (ELISA). Comparison of the two genotypes in children with bronchial asthma revealed significantly increased IgE ($p < 0.001$), increased specific IgE ($p < 0.001$), as investigated by SPT or RAST ($n = 10$ **allergens** tested), increased number of peripheral blood eosinophils ($p < 0.01$), increased serum IgG1(f/f)($p < 0.001$), IgG2(n/n) ($p < 0.001$) and IgG3(b/b)($p < 0.01$) levels, and decreased CD8 given in percent of the total number of peripheral lymphocytes, ($p < 0.02$) in the G3m(b/b)-G1m(f/f)-G2m(n/n) genotype. The asthmatic children with the G3m(g/g)-G1m(a/a)-G2m(-n/-n) genes instead showed low IgE levels, practically no specific IgE **antibodies**, a lower number of peripheral blood eosinophils, lower IgG1(a/a), IgG2(-n/-n) and IgG3(g/g) serum levels and higher CD8 lymphocyte numbers. The results show that the IGHG3(b/b)-IGHG1(f/f)-IGHG2(n/n) genes are in linkage disequilibrium with **allergen**-specific high-responding IGHE genes and present the atopic phenotype of bronchial asthma, while the IGHG3(g/g)-IGHG1(a/a)-IGHG2(-n/-n) genes present the nonatopic phenotype of childhood asthma. The two genotypes with different amino acid epitopes of their constant heavy gamma1, gamma2 and gamma3 chains presented qualitatively different IgG1, IgG2 and IgG3 molecules, respectively, and also different serum IgG1, IgG2 and IgG3 levels, together with different numbers of peripheral blood eosinophils and CD8 lymphocytes. The two IGHG genotypes represent different pathways of human immune regulation. An association of atopic IGHG genotype with other candidate genes for atopy could be suggested.

L13 ANSWER 9 OF 76 MEDLINE
ACCESSION NUMBER: 1998196410 MEDLINE
DOCUMENT NUMBER: 98196410
TITLE: Is tyrosine kinase activation involved in **basophil** histamine release in asthma due to

western red cedar?.
AUTHOR: Frew A; Chan H; Salari H; Chan-Yeung M
CORPORATE SOURCE: Department of Medicine Vancouver General Hospital, University of British Columbia, Canada.
SOURCE: ALLERGY, (1998 Feb) 53 (2) 139-43.
Journal code: 39C. ISSN: 0105-4538.
PUB. COUNTRY: Denmark
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199807
ENTRY WEEK: 19980705
AB Occupational asthma due to western red cedar is associated with histamine release from **basophils** and **mast cells** on exposure to plicatic acid (PA), but the mechanisms underlying this response remain unclear. Specific kinase **inhibitors** were used to study the role of tyrosine and serine/threonine kinases in PA-induced histamine release from human **basophils**. Pretreatment with the tyrosine kinase **inhibitor** methyl 2,5-dihydroxy-cinnamate (MDHC) attenuated histamine release from **basophils** triggered by anti-IgE (29.8% **inhibition**; n = 15; P < 0.01) or grass pollen (48% **inhibition**; n = 6; P < 0.01). **Inhibition** was concentration-dependent and could be reversed by washing the cells in buffer, while the inactive stereoisomer of MDHC did not affect histamine release. In contrast, the protein kinase C **inhibitor** staurosporine did not affect histamine release by either anti-IgE or grass pollen. Pretreatment with MDHC partially **inhibited** PA-induced histamine release from **basophils** of 6/9 patients with red cedar asthma (25.4% vs 33.8%; P = NS). Staurosporine gave a similar level of **inhibition** of PA-induced histamine release (25.3% vs 33.8%; P = NS). Thus, signal transduction of the human **basophil** **Fc epsilon** RI appears to depend upon tyrosine kinase activation, but not on protein kinase C (serine/threonine kinase) activation. The lack of specific effect on plicatic acid-induced histamine release in **basophils** obtained from patients with occupational asthma due to western red cedar suggests that tyrosine kinases are not as important in this disease as in atopic asthma, and is consistent with the view that histamine release in red cedar asthma is largely IgE-independent.

L13 ANSWER 10 OF 76 EMBASE COPYRIGHT 1999 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 1998307954 EMBASE
TITLE: Effects of mitogen-activated protein kinase kinase **inhibitor** PD 098059 on antigen challenge of guinea-pig airways in vitro.
AUTHOR: Tsang F.; Koh A.H.M.; Ting W.L.; Wong P.T.H.; Wong W.S.F.
CORPORATE SOURCE: W.S.F. Wong, Department of Pharmacology, Faculty of Medicine, National University of Singapore, 10 Kent Ridge Crescent, Singapore 119260, Singapore
SOURCE: British Journal of Pharmacology, (1998) 125/1 (61-68).
Refs: 48
ISSN: 0007-1188 CODEN: BJPCBM
COUNTRY: United Kingdom
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 015 Chest Diseases, Thoracic Surgery and Tuberculosis
030 Pharmacology
037 Drug Literature Index
LANGUAGE: English
SUMMARY LANGUAGE: English
AB 1. It has been shown that activation of protein tyrosine kinases is the earliest detectable signalling response to **Fc epsilon**.RI cross-linking on **mast cell**. Following tyrosine kinase activation, a family of mitogen-activated protein kinases (MAPKs) was found to be activated as well. The present study examined the role of MAPK signalling cascade in in vitro model of **allergic** asthma using a specific MAPK kinase **inhibitor** PD 098059. 2. Guinea-pigs were passively sensitized with IgG **antibody** raised against ovalbumin (OA). Effects of PD 098059 on OA-induced anaphylactic contraction of isolated bronchi and release of histamine and peptidoleukotrienes from chopped lung preparations were studied. 3. PD 098059 (10-50 .mu.M) produced only minor **reduction** of maximal OA-induced bronchial contraction. In contrast, the rate of relaxation of OA-induced bronchial contraction was markedly faster in the presence of PD 098059 than the vehicle control in a concentration-dependent manner. 4. These observations corroborate well with the inability of PD 098059 (5-50 .mu.M) to substantially block the OA-induced release of histamine and with marked **inhibition** of OA-induced release of peptidoleukotrienes from lung fragments in the presence of PD 098059. Exogenous arachidonic acid-induced release of peptidoleukotrienes from lung fragments was not blocked by PD 098059. 5. In immunoblotting study, we found that p42(MAPK) was constitutively expressed in guinea-pig bronchi. However, treatment with OA, histamine or LTD4 did not cause activation of p42(MAPK). These findings together with the lack of **inhibitory** effects of PD 098059 on bronchial contraction induced by histamine or LTD4 suggest that histamine- and LTD4-induced bronchial contractions are not mediated by p42(MAPK) activation. 6. Taken together, our findings show that **inhibition** of MAPK signalling cascade by PD 098059 significantly **reduced** the OA-triggered release of peptidoleukotrienes leading to rapid relaxation of anaphylactic branchial contraction. On the other hand, p42(MAPK) did not play a role in histamine- or LTD4-induced bronchial smooth muscle contraction suggesting that PD 098059 exerts its **inhibitory** effects on OA-induced bronchial contraction primarily through **inhibition** of peptidoleukotrienes release from **mast cells**.

L13 ANSWER 11 OF 76 WPIDS COPYRIGHT 1999 DERWENT INFORMATION LTD
ACCESSION NUMBER: 97-448633 [41] WPIDS
DOC. NO. CPI: C97-143047
TITLE: Novel mimetope(s) for **antibody** BSW17 - useful for preparation of vaccines against IgE-mediated diseases, especially **allergy**

DERWENT CLASS: B04 D16
INVENTOR(S): KRICEK, F; STADLER, B
PATENT ASSIGNEE(S): (NOVS) NOVARTIS AG
COUNTRY COUNT: 75
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 9731948	A1	970904 (9741)*		EN	72

RW: AT BE CH DE DK EA ES FI FR GB GH GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG
W: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE HU IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK TJ TM TR TT UA UG US UZ VN
AU 9718796 A 970916 (9803)

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9731948	A1	WO 97-EP1013	970228
AU 9718796	A	AU 97-18796	970228

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 9718796	A Based on	WO 9731948

PRIORITY APPLN. INFO: GB 96-17702 960822; GB 96-4412 960301
AB WO 9731948 A UPAB: 971013
A novel immunogenic molecule comprises: (i) at least one moiety of a BSW17 mimetope peptide; and (ii) a moiety capable of eliciting an immune response against the peptide. Also claimed is a ligand comprising an **antibody** domain specific for a BSW17 mimetope peptide moiety as above, where the **antibody** domain is also reactive with the IgE heavy chain amino acid sequence which comprises the natural epitope recognised by BSW17.
USE - The peptide is used in the preparation of vaccines against an IgE-mediated disease, especially **allergy** (claimed). The molecules can be used as vaccines for the generation of **antibodies** which **inhibit mast cell/basophil** triggering by blocking IgE/**Fc epsilon** RI alpha binding or IgE synthesis.
ADVANTAGE - The reaction to these mimetopes is safer as compared to the "classical vaccine" approach, as no IgE-derived protein fragments are present to generate cross-reactive **antibodies** in immunised patients.
Dwg.0/15

L13 ANSWER 12 OF 76 EMBASE COPYRIGHT 1999 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 1998018076 EMBASE
TITLE: Identification of contact residues in the IgE binding site of human **Fc.epsilon**.RI.alpha..
AUTHOR: Cook J.P.D.; Henry A.J.; McDonnell J.M.; Owens R.J.; Sutton B.J.; Gould H.J.
CORPORATE SOURCE: H.J. Gould, Randall Institute, King's College London, 26-29 Drury Lane, London WC2B 5RL, United Kingdom
SOURCE: Biochemistry, (1997) 36/50 (15579-15588).
Refs: 44
ISSN: 0006-2960 CODEN: BICHAW
COUNTRY: United States
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 026 Immunology, Serology and Transplantation
029 Clinical Biochemistry
LANGUAGE: English
SUMMARY LANGUAGE: English
AB The high-affinity receptor for immunoglobulin E (IgE), **Fc. epsilon**.RI, is an .alpha..beta..gamma.2 tetramer found on **mast cells**, **basophils**, and several other types of immune effector cells. The interaction of IgE with the .alpha.-subunit of **Fc.epsilon**.RI is central to the pathogenesis of **allergy**. Detailed knowledge of the mode of interaction of **Fc.epsilon.RI** with IgE may facilitate the development of **inhibitors** for general use in the treatment of **allergic** disease. To this end we have performed site-directed mutagenesis on a soluble form of the **Fc.epsilon**.RI .alpha.-chain (sFc.epsilon.RI.alpha.). The effects of four mutations in the second immunoglobulin-like domain of sFc.epsilon.RI.alpha. upon the kinetics of binding to IgE and fragments of IgE have been analyzed using surface plasmon resonance. As described in the preceding paper of this issue [Henry, A. J., et al. (1997) Biochemistry 36, 15568-15578], biphasic binding kinetics was observed. Two of the mutations had significant effects on binding: K117D **reduced** the affinity of sFc.epsilon.RI.alpha. for IgE by a factor of 30, while D159K increased the affinity for IgE by a factor of 7, both principally through changes in the rates of dissociation of the slower phase of the interaction. Circular dichroism spectra of sFc.epsilon.RI.alpha. incorporating either of these mutations were indistinguishable from those of wild-type sFc.epsilon.RI.alpha., demonstrating that the native conformation had not been disrupted. Our results, together with those from site-directed mutagenesis on fragments of IgE presented in the accompanying paper, define the contact surfaces in the IgE:sFc.epsilon.RI.alpha. complex.

L13 ANSWER 13 OF 76 BIOSIS COPYRIGHT 1999 BIOSIS DUPLICATE 4
ACCESSION NUMBER: 1997:308669 BIOSIS
DOCUMENT NUMBER: PREV199799616472
TITLE: The effect of an anti-IgE **monoclonal antibody** on the early- and late-phase responses to **allergen** inhalation in asthmatic subjects.
AUTHOR(S): Fahy, John V. (1); Fleming, H. Edward; Wong, Hofer H.; Liu, Jane T.; Su, John Q.; Reimann, James; Fick., Robert B., Jr.; Boushey, Homer A.

CORPORATE SOURCE: (1) Box 0130, Univ. California, San Francisco, CA 94143 USA
SOURCE: American Journal of Respiratory and Critical Care Medicine, (1997) Vol. 155, No. 6, pp. 1828-1834. ISSN: 1073-449X.
DOCUMENT TYPE: Article
LANGUAGE: English
AB A humanized murine **monoclonal antibody** directed to the **Fc-epsilon-R1**-binding domain of human IgE (rhuMAb-E25) has been shown to **inhibit** the binding of IgE to **mast cells** without provoking **mast cell** activation. To examine the effects of neutralizing IgE on **allergic** airway responses, we assessed the effects of 9 wk of treatment with rhuMAb-E25 in a parallel group, randomized, double-blind, placebo-controlled study of 19 **allergic** asthmatic subjects. We found that treatment with rhuMAb-E25 **reduced** serum IgE, increased the dose of **allergen** needed to provoke an early asthmatic response, **reduced** the mean maximal fall in FEV-1 during the early response (30 +- 10% at baseline to 18.8 +- 8%, versus 33 +- 8% at baseline to 34 +- 4% after placebo; p = 0.01), and **reduced** the mean maximal fall in FEV-1 during the late response (24 +- 20% at baseline to 9 +- 10% versus 20 +- 17% at baseline to 18 +- 17% after placebo; p = 0.047). We conclude that an anti-IgE **monoclonal antibody**, which **inhibits** binding of IgE to its receptor, suppresses the early- and late-phase responses to inhaled **allergen** in **allergic** asthmatic subjects. Targeting IgE with rhuMAb-E25 might be a useful treatment for **allergic** asthma.

L13 ANSWER 14 OF 76 EMBASE COPYRIGHT 1999 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 1998000896 EMBASE
TITLE: Topical glucocorticoid augments IgE-mediated passive cutaneous anaphylaxis in Balb/C mice and **mast cell** deficient WBB6F1 v/v mice.
AUTHOR: Katayama I.; Igawa K.; Minatohara K.; Nishioka K.
CORPORATE SOURCE: I. Katayama, Department of Dermatology, Nagasaki Univ. School of Medicine, 1-7-1 Sakamoto Nagasaki, Nagasaki 852, Japan
SOURCE: Clinical and Experimental Allergy, (1997) 27/12 (1477-1483). Refs: 24 ISSN: 0954-7894 CODEN: CLEAEN
COUNTRY: United Kingdom
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 013 Dermatology and Venereology
026 Immunology, Serology and Transplantation
037 Drug Literature Index
LANGUAGE: English
SUMMARY LANGUAGE: English
AB Background: In a last decade, new types of skin manifestations have been recognized in atopic dermatitis especially in Japan. They are frequently observed in adult patients with atopic dermatitis after a long-standing steroid ointment and termed adult type-atopic dermatitis. Objective: To clarify whether topical glucocorticoid (GC) modulates cutaneous inflammatory reactions in addition to known anti-inflammatory effect, we have examined the effect of long-term application of topical GC on IgE-mediated murine cutaneous reactions. Methods Fifty microlitres of diflucortolone valerate (1 mg/mL), prednisolone valerateacetate (3 mg/mL), or triamcinolone acetonide (1 mg/mL) were applied seven times on alternate day, to the flank skin of mice. On day 12 when mice received the seventh application of GC, each mouse was given an intravenous application of IgE anti-DNP **antibody** (PCA titre > x 2560) 1 h before the skin test with 0.15% DNFB in acetone:olive oil (4: 1) on the fight pinna. The left pinna was painted with a vehicle as a control. Increased ear thickness was measured at 1, 4, 24, 48 and 72h to assess the augmentry effect of GC. Results: Topical application of GC (50 .mu.g diflucortolone valerate in ethanol) on the flank skin seven times on alternate days, augmented expression of passive cutaneous anaphylaxis reaction on the ear skin induced by intravenous applications of **monoclonal** IgE anti-DNP **antibody** and following the challenge test. In contrast, topical application of GC **inhibited** the reactions when applied on the challenged sites. Several types of GC, but not vitamin D3, augmented the skin reactions and these augmented reactions persisted for 72 h when control skin reactions subsided. GC induced a late phase but not an early phase cutaneous reaction in **mast cell** deficient WBB6F1 v/v mice by IgE anti-DNP **antibody**. Conclusion: Long-term application of topical GC might modulate local cutaneous immune response and augment IgE-mediated cutaneous reactions. **Fc epsilon**. R(+) cells other than **mast cell** might be involved in the IgE-mediated late-phase reaction.

L13 ANSWER 15 OF 76 MEDLINE
ACCESSION NUMBER: 97166096 MEDLINE
DOCUMENT NUMBER: 97166096
TITLE: Down-regulation of **Fc(epsilon)**RI expression on human **basophils** during in vivo treatment of atopic patients with anti-IgE **antibody**.
AUTHOR: MacGlashan D W Jr; Bochner B S; Adelman D C; Jardieu P M; Togias A; McKenzie-White J; Sterbinsky S A; Hamilton R G; Lichtenstein L M
CORPORATE SOURCE: Johns Hopkins Asthma and Allergy Center, Baltimore, MD 21224, USA.. dmacglas@welchlink.welch.jhu.edu
CONTRACT NUMBER: AI07290 (NIAID)
AI20253 (NIAID)
SOURCE: JOURNAL OF IMMUNOLOGY, (1997 Feb 1) 158 (3) 1438-45. Journal code: IFB. ISSN: 0022-1767.
PUB. COUNTRY: United States
(CLINICAL TRIAL)
(CLINICAL TRIAL, PHASE I)
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals; Cancer Journals
ENTRY MONTH: 199704
ENTRY WEEK: 19970404
AB Treatment of **allergic** disease by decreasing circulating IgE with anti-IgE Abs is currently under clinical study. Based on previous unrelated studies, it appeared likely that **Fc(epsilon)**RI expression on **basophils** and **mast cells** might also be regulated by levels of circulating IgE Ab. Therefore, the expression of IgE and **Fc(epsilon)**RI on human **basophils** was examined in 15 subjects receiving humanized anti-IgE mAb intravenously. Treatment with the anti-IgE mAb decreased free IgE levels to 1% of pretreatment levels and also resulted in a marked down-regulation of **Fc(epsilon)**RI on **basophils**. Median pretreatment densities of **Fc(epsilon)**RI were approximately 220,000 receptors per **basophil** and after 3 mo of treatment, the densities had decreased to a median of 8,300 receptors per **basophil**. Flow cytometric studies, conducted in parallel, showed similar results and also showed in a subset of 3 donors that receptors decreased with a t1/2 of approximately 3 days. The responsiveness of the cells to IgE-mediated stimulation using anti-IgE Ab was marginally decreased (approximately 40%) while the response of the same cells to stimulation with dust mite Ag, Dermatophagoides farinae, was **reduced** by approximately 90%. One possible explanation for these results is that **Fc(epsilon)**RI density is directly or indirectly regulated by plasma-free IgE levels.

L13 ANSWER 16 OF 76 MEDLINE DUPLICATE 5
ACCESSION NUMBER: 97477414 MEDLINE
DOCUMENT NUMBER: 97477414
TITLE: Negative regulation of **Fc epsilon** RI-mediated degranulation by CD81.
AUTHOR: Fleming T J; Donnadieu E; Song C H; Laethem F V; Galli S J; Kinet J P
CORPORATE SOURCE: Department of Pathology, Beth Israel Deaconess Medical Center, Boston, Massachusetts 02215, USA.
CONTRACT NUMBER: CA/AI-72074 (NCI)
AI/CA-23990 (NIAID)
GM-53950 (NIGMS)
SOURCE: JOURNAL OF EXPERIMENTAL MEDICINE, (1997 Oct 20) 186 (8) 1307-14. Journal code: I2V. ISSN: 0022-1007.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals; Cancer Journals
ENTRY MONTH: 199801
ENTRY WEEK: 19980104
AB Signaling through the high affinity receptor for immunoglobulin E (**Fc epsilon** RI) results in the coordinate activation of tyrosine kinases before calcium mobilization. Receptors capable of interfering with the signaling of antigen receptors, such as **Fc epsilon** RI, recruit tyrosine and inositol phosphatases that results in diminished calcium mobilization. Here, we show that **antibodies** recognizing CD81 **inhibit Fc epsilon** RI-mediated **mast cell** degranulation but, surprisingly, without affecting aggregation-dependent tyrosine phosphorylation, calcium mobilization, or leukotriene synthesis. Furthermore, CD81 **antibodies** also **inhibit mast cell** degranulation in vivo as measured by **reduced** passive cutaneous anaphylaxis responses. These results reveal an unsuspected calcium-independent pathway of antigen receptor regulation, which is accessible to engagement by membrane proteins and on which novel therapeutic approaches to **allergic** diseases could be based.

L13 ANSWER 17 OF 76 BIOSIS COPYRIGHT 1999 BIOSIS
ACCESSION NUMBER: 1997:170653 BIOSIS
DOCUMENT NUMBER: PREV199799477256
TITLE: The effect of intravenous administration of a chimeric anti-IgE **antibody** on serum IgE levels in atopic subjects: Efficacy, safety, and pharmacokinetics.
AUTHOR(S): Corne, Jonathan (1); Djukanovic, Ratko; Thomas, Lynette; Warner, Jane; Botta, Luigi; Grandordy, Beatrice; Gygax, Daniel; Heusser, Christoph; Patalano, Francesco; Richardson, William; Kilchherr, Erich; Staehelin, Theophil; Davis, Frances; Gordon, Wayne; Sun, Lee; Liou, Ruey; Wang, Georg; Chang, Tse-Wen; Holgate, Stephen
CORPORATE SOURCE: (1) Univ. Med., Centre Block, Southampton General Hosp., Tremona Rd., Southampton SO16 6YD UK
SOURCE: Journal of Clinical Investigation, (1997) Vol. 99, No. 5, pp. 879-887. ISSN: 0021-9738.
DOCUMENT TYPE: Article
LANGUAGE: English
AB CGP 51901 is a non-anaphylactogenic mouse/human chimeric anti-human IgE **antibody** that binds to free IgE and surface IgE of IgE-expressing B cells but not to IgE bound to high affinity **IgE receptors (Fc-epsilon-RI)** on **mast cells** and **basophils** or low affinity **IgE receptors (Fc-epsilon-R2)** on other cells. A phase 1 double-blind, placebo-controlled, single dose study with doses of 3, 10, 30, and 100 mg of CGP 51901 was conducted in 33 pollen-sensitive subjects who had raised levels of serum IgE and received either intravenous CGP 51901 or placebo. The administration of CGP 51901 was well tolerated and resulted in a decrease of serum free IgE levels in a dose-dependent manner, with suppression after 100 mg of CGP 51901 reaching gt 96%. Time of recovery to 50% of baseline IgE correlated with the dose of administered **antibody** and ranged from a mean of 1.3 d for the 3 mg to 39 d for the 100 mg dose. Total IgE, comprised of free and complexed IgE, increased as stored and newly synthesized IgE bound to CGP 51901. Complexed IgE was eliminated at a rate comparable with the terminal half-life of free CGP 51901 (11-13 d at all doses). Only one subject showed a weak **antibody** response against CGP 51901. We conclude that the use of anti-human IgE **antibody** is safe and effective in **reducing** serum IgE levels in atopic individuals and provides a potential therapeutic approach to the treatment of atopic

diseases.

L13 ANSWER 18 OF 76 MEDLINE DUPLICATE 6
ACCESSION NUMBER: 97430885 MEDLINE
DOCUMENT NUMBER: 97430885
TITLE: Nonspecific binding of IgE to allergens.
AUTHOR: Jensen-Jarolim E; Vogel M; Zavazal V; Stadler B M
CORPORATE SOURCE: Institute of General and Experimental Pathology, Allgemeines Krankenhaus Wien, Austria.
SOURCE: ALLERGY, (1997 Aug) 52 (8) 844-52.
Journal code: 39C. ISSN: 0105-4538.
PUB. COUNTRY: Denmark
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199712
ENTRY WEEK: 19971204
AB Nonspecific IgE binding to allergens was observed in testing myeloma IgEs, namely, IgE-VL and IgE-PS, chimeric IgE (IgE-JW8), and the recombinant IgE Fc epsilon peptide CH1-CH4, in two different immunoassays. This binding was concentration-dependent but detectable only at higher IgE concentration. In RAST inhibition, IgE-allergen interactions could be reduced by using either matching or nonmatching allergens. In order to test whether the nonspecific binding of IgE to allergens was due to carbohydrate interaction, myeloma IgEs and the chimeric IgE were desialized with neuraminidase. Desialized samples were equally well recognized by xenogenic antibodies as native IgEs, but binding of IgE to Fc epsilon receptors on basophils was affected by the treatment, as shown in the histamine-release assay. Desialization of IgE affected also its binding capacity to allergens in RAST: binding of chimeric IgE was reduced, but nonspecific binding of myeloma IgE-VL was enhanced. Hence, nonspecific allergen-IgE binding may be partly due to a lectin-like interaction, but may depend mostly on the tertiary structure of IgE. Thus, nonspecific IgE-allergen interactions might present a problem 1) at high IgE concentration, and 2) depend on the grade of sialization of IgE, which might affect its conformation. This may explain why patients with elevated total IgE levels often have multiple weak positive RASTs with non-cross-reactive allergens.

L13 ANSWER 19 OF 76 MEDLINE DUPLICATE 7
ACCESSION NUMBER: 1998099330 MEDLINE
DOCUMENT NUMBER: 98099330
TITLE: Anti-inflammatory effect of beta 2-agonists: inhibition of TNF-alpha release from human mast cells.
AUTHOR: Bissonnette E Y; Befus A D
CORPORATE SOURCE: Department of Medicine, University of Alberta, Edmonton, Canada.
SOURCE: JOURNAL OF ALLERGY AND CLINICAL IMMUNOLOGY, (1997 Dec) 100 (6 Pt 1) 825-31.
Journal code: H53. ISSN: 0091-6749.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals
ENTRY MONTH: 199804
ENTRY WEEK: 19980401
AB Beta 2-agonists inhibit the release of preformed mediators such as histamine and newly synthesized mediators such as prostaglandin D2 from mast cells. However, although mast cells have been identified as an important source of several cytokines including tumor necrosis factor-alpha (TNF-alpha), there is no information about their regulation by beta 2-agonists. Thus given the importance of TNF-alpha in inflammation and the widespread use of beta 2-agonists, we investigated the effect of long-acting (salmeterol) and short-acting (salbutamol) beta 2-agonists on the secretion of TNF-alpha from human skin mast cells. Treatment of mast cells with salmeterol or salbutamol (100 nmol/L) inhibited the IgE-dependent release of TNF-alpha (82% and 74%, respectively). Moreover, 2-hour treatment with salmeterol, isoproterenol, or salbutamol inhibited mast cell cytotoxicity against a TNF-alpha-sensitive cell line, WEHI-164, with an IC50 of 71, 50, and 29 nmol/L, respectively. Specificity for beta-adrenergic receptors was shown with propranolol. The inhibitory effect of beta 2-agonists was observed after only 20 minutes of treatment but was lost by 24 hours after removal of salbutamol and isoproterenol (7% and 11% inhibition remaining, respectively). In contrast, the inhibition of TNF-alpha release was increased 1 hour after removal of salmeterol and remained significant 24 hours later. Furthermore, beta 2-agonists did not show tachyphylaxis for the inhibition of TNF-alpha release. Thus selective beta2-agonists demonstrate anti-inflammatory activity by inhibiting the release of TNF-alpha from mast cells stimulated through their IgE receptor or by a tumor target cell. This inhibitory effect of beta-agonists may be important in their mode of action in the treatment of allergic diseases.

L13 ANSWER 20 OF 76 MEDLINE DUPLICATE 8
ACCESSION NUMBER: 97300818 MEDLINE
DOCUMENT NUMBER: 97300818
TITLE: Expression of high-affinity IgE receptors (Fc epsilon RI) on peripheral blood basophils, monocytes, and eosinophils in atopic and nonatopic subjects: relationship to total serum IgE concentrations.
AUTHOR: Sihra B S; Kon O M; Grant J A; Kay A B
CORPORATE SOURCE: Imperial College School of Medicine, National Heart and Lung Institute, London.
SOURCE: JOURNAL OF ALLERGY AND CLINICAL IMMUNOLOGY, (1997 May) 99 (5) 699-706.
Journal code: H53. ISSN: 0091-6749.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals
ENTRY MONTH: 199708
ENTRY WEEK: 19970802
AB BACKGROUND: High-affinity IgE receptors (Fc epsilon RI) have been identified on peripheral blood basophils, monocytes, and eosinophils; but the relative receptor expression on these cells and their relationship to atopy are unclear. OBJECTIVE: The aim of this study was to compare Fc epsilon RI expression on these cell types and assess their relationship to total serum IgE concentrations in subjects with atopic asthma, rhinitis, or dermatitis compared with nonatopic control subjects. METHODS: Flow cytometry was used to evaluate Fc epsilon RI expression by determining the specific mean fluorescence of the binding of two anti-Fc epsilon RI alpha-chain monoclonal antibodies (15-1, which competes with IgE for receptor binding, and 22E7, which is noncompetitive). RESULTS: Compared with basophils Fc epsilon RI expression (determined by 22E7 specific mean fluorescence) was greatly reduced on monocytes and was only detectable on eosinophils in a small minority of subjects. Nevertheless, Fc epsilon RI expression on all three cell types was significantly increased in atopic patients compared with nonatopic control subjects ($p < 0.0001$ for basophils, $p = 0.003$ for monocytes, and $p = 0.039$ for eosinophils). Fc epsilon RI expression on both basophils and monocytes in all subjects correlated significantly with serum IgE concentrations ($r = 0.86$ and 0.55, respectively; $p < 0.001$). For each subject, and on all three cell types, the specific mean fluorescence after 22E7 staining was greater than with 15-1, implying some degree of receptor occupancy. CONCLUSION: Fc epsilon RI expression on peripheral blood monocytes was considerably less than on basophils and barely detectable on eosinophils. Elevated Fc epsilon RI expression was observed in atopic subjects with all three cell types, suggesting a role for these receptors in IgE-mediated allergic inflammation. The possibility of common regulatory mechanisms was suggested by the correlation of Fc epsilon RI expression on basophils and monocytes with serum IgE concentrations.

L13 ANSWER 21 OF 76 EMBASE COPYRIGHT 1999 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 97303666 EMBASE
TITLE: Urticaria, angioedema, and autoimmunity.
AUTHOR: Zuraw B.L.
CORPORATE SOURCE: Dr. B.L. Zuraw, Scripps Research Institute, 10550 North Torrey Pines Road, San Diego, CA 92037, United States
SOURCE: Clinics in Laboratory Medicine, (1997) 17/3 (559-569).
Refs: 63
ISSN: 0272-2712 CODEN: CLMED6
COUNTRY: United States
DOCUMENT TYPE: Journal
FILE SEGMENT: 011 Otorhinolaryngology
013 Dermatology and Venereology
026 Immunology, Serology and Transplantation
LANGUAGE: English
SUMMARY LANGUAGE: English
AB Until relatively recently, the pathophysiologic significance of the recognized associations between autoimmunity and swelling was largely unknown. It has now become clear that autoimmunity can play a critical role in the pathogenesis of chronic urticaria and acquired C1-INH deficiency with angioedema. Chronic urticaria has been associated with antithyroid autoantibodies, anti-IgE autoantibodies, and anti-Fc.epsilon.RI autoantibodies. The latter two autoantibodies are particularly interesting in that they have been shown to be capable of directly causing mast cell degranulation. It appears likely, therefore, that most cases of chronic urticaria will ultimately be considered an autoimmune disease rather than an allergic disease. The link between autoimmunity and the development of acquired C1-INH deficiency is also of interest. Recent studies suggest that the majority of acquired C1- INH deficiency patients have anti-C1-INH autoantibodies that appear to be responsible for the development of the C1-INH deficiency. In addition, both chronic urticaria and C1-INH deficiency can be associated with other autoimmune diseases, although the importance of these associations remains to be determined. Recognition of the role of autoantibodies in the pathogenesis of chronic urticaria and acquired C1-INH deficiency has altered the range of diagnostic and therapeutic approaches that need to be considered in approaching patients with chronic urticaria or acquired C1-INH deficiency. Future progress in understanding the genesis of these diseases may help elucidate the mechanism of autoantibody generation.

L13 ANSWER 22 OF 76 MEDLINE DUPLICATE 9
ACCESSION NUMBER: 1998364066 MEDLINE
DOCUMENT NUMBER: 98364066
TITLE: From allergy to schistosomes: role of Fc receptors and adhesion molecules in eosinophil effector function.
AUTHOR: Nutten S; Trottein F; Gounni A S; Papin J P; Capron A; Capron M
CORPORATE SOURCE: Centre d'Immunologie et de Biologie Parasitaire, Unite INSERM 167, Institut Pasteur, Lille, France.
SOURCE: MEMORIAS DO INSTITUTO OSWALDO CRUZ, (1997) 92 Suppl 2
9-14. Ref: 30
Journal code: MRY. ISSN: 0074-0276.
PUB. COUNTRY: Brazil
Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199812
ENTRY WEEK: 19981204
AB The dual function of eosinophils has been evidenced in protective

immunity against parasites as well as in pathological manifestations during **allergic** disorders. We have demonstrated that a new class of **IgE receptors, Fc epsilon** RII/CD23, was involved in the functional duality of eosinophils and other proinflammatory cells. More recently, we have shown that **Fc epsilon** RI, the high affinity **IgE receptor** thought to be only expressed by **basophils** and most cells, was involved in eosinophil-mediated cytotoxicity against schistosomes as well as in mediator release. These results favour the view that both IgE and its receptors have been primarily associated to a protective immune response, rather than to pathology. Not only **IgE receptors** but also members belonging to the family of adhesion molecules can participate as co-receptors in eosinophil effector function. The **inhibitory** role of **monoclonal antibodies** to Lewis(X) (Le(X) CD15) or to selectins in eosinophil-mediated cytotoxicity towards schistosomes and the detection of Le(X) and selectin-like molecules on schistosomula surface indicate a double interaction mediated by selectins and their carbohydrate ligands between eosinophils and schistosomula. These results suggest new functions for these adhesion molecules, previously known to be involved mainly in cell filtration.

L13 ANSWER 23 OF 76 WPIDS COPYRIGHT 1999 DERWENT INFORMATION LTD
ACCESSION NUMBER: 98-370594 [37] WPIDS
CROSS REFERENCE: 89-220465 [30]; 91-022051 [03]; 91-252608 [34]; 93-345027 [43]; 94-278985 [34]; 94-357359 [44]; 95-206310 [27]; 95-327735 [42]; 96-087117 [09]; 96-238825 [24]; 97-201532 [18]; 98-017568 [02]
DOC. NO. CPI: C96-117495
TITLE: Treating **allergic** reactions using **antibodies** - which bind secreted IgE and membrane-bound IgE on IgE-expressing cells but not IgE bound to **basophils**.
DERWENT CLASS: B04 D16
INVENTOR(S): CHANG, T W
PATENT ASSIGNEE(S): (TANO-N) TANOX BIOSYSTEMS INC
COUNTRY COUNT: 1
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
US 5543144	A	960806 (9637)*		EN	16

APPLICATION DETAILS:

PATENT NO	KIND		APPLICATION	DATE
US 5543144	A	CIP of	US 87-140036	871231
		CIP of	US 88-226421	880729
		CIP of	US 88-291068	881228
		CIP of	US 89-357483	890526
			US 93-7180	930121

FILING DETAILS:

PATENT NO	KIND		PATENT NO
US 5543144	A	CIP of	US 5420251
		CIP of	US 5422258

PRIORITY APPLN. INFO: US 93-7180 930121; US 87-140036 871231; US 88-226421 880729; US 88-291068 881228; US 89-357483 890526
AB US 5543144 A UPAB: 980112
Method (A) for **reducing** circulating IgE or treating an **allergic** reaction in a mammal, comprises administering to the mammal a **monoclonal antibody** (MAb) having a human IgG1 and IgG3 constant region that binds to secreted IgE and to membrane-bound IgE on IgE-expressing cells but not to IgE bound to **basophils**.
Also claimed are:
(1) a method (B) for **reducing** circulating IgE or treating **allergic** reactions in a mammal comprising administering to the mammal a MAb that binds to secreted IgE and to membrane-bound IgE on IgE-expressing cells but not to IgE which is bound to the **Fc epsilon** RII receptor and not to IgE bound to **basophils**;
(2) a method (C) for **reducing** circulating IgE in a mammal comprising administering to the mammal an **antibody** that binds to secreted IgE and to membrane-bound IgE on Ig-expressing cells but not to IgE which is bound to the **Fc epsilon** RII receptor and not to IgE bound to **basophils**, and
(3) a method (D) for treating **allergic** reactions in a human comprising administering a MAb having its complementarity determining regions of murine origin and human IgC1 or IgG3 constant regions an binding to secreted IgE and to membrane-bound IgE on IgE-expressing cells but not to IgE bound to **basophils**.
USE - The methods can be used to treat IgE-mediated hypersensitivity in **allergic** diseases such as extrinsic bronchial asthma, hay fever and food and drug **allergies**.
ADVANTAGE - The methods can selectively **reduce** circulating IgE and deplete IgE-producing cells without inducing the release of pharmacologic mediators of **allergies**.
Dwg.0/0

L13 ANSWER 24 OF 76 MEDLINE DUPLICATE 10
ACCESSION NUMBER: 97068418 MEDLINE
DOCUMENT NUMBER: 97068418
TITLE: Influence of bee venom immunotherapy on degranulation and leukotriene generation in human blood **basophils** [see comments].
COMMENT: Comment in: Clin Exp Allergy 1996 Oct;26(10):1101-4
AUTHOR: Jutel M; Muller U R; Fricker M; Rihs S; Pichler W J; Dahinden C
CORPORATE SOURCE: Medical Division, Zieglerspital, Bern, Switzerland.
SOURCE: CLINICAL AND EXPERIMENTAL ALLERGY, (1996 Oct) 26 (10) 1112-8.
Journal code: CEB. ISSN: 0954-7894.
PUB. COUNTRY: ENGLAND: United Kingdom
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199704
AB BACKGROUND: Rapid clinical tolerance can be induced over several hours by very fast bee venom immunotherapy (VIT) protocols. OBJECTIVE: To investigate the mechanisms underlying VIT we examined the changes of blood **basophil** responsiveness during VIT. METHODS: Seven bee venom **allergic** patients with a history of severe systemic reactions after a bee sting were investigated. A cumulative dose of 111.1 micrograms bee venom (BV) was administered sc over 3.5 h under intensive care conditions according to an ultra-rush protocol. The release of histamine and the formation of leukotrienes in response to BV, major BV **allergen** Phospholipase A2 (PLA), **IgE receptor** cross-linking with the use of **monoclonal antibodies** against IgE and **IgE receptor**, as well as IgE independent activation in response to C5a were determined in vitro before and after ultra-rush VIT. RESULTS: We demonstrated a decrease of total histamine in peripheral blood leucocytes just after VIT. Histamine release in response to all the stimuli used is not affected by ultra-rush VIT, if expressed as per cent release of total histamine. However, the absolute amount product released in response to stimulation was decreased, particularly with **allergen** (BV, PLA). We also found a significant **reduction** of LTC4 formation after VIT in samples stimulated with specific **allergen** (BV, PLA). CONCLUSION: Blood **basophils** are a target for VIT, which induces impaired release of both preformed and newly generated mediators. However, we believe the basic mechanisms of rapid clinical tolerance induced by ultra-rush VIT remain to be investigated.

L13 ANSWER 25 OF 76 MEDLINE DUPLICATE 11
ACCESSION NUMBER: 96185818 MEDLINE
DOCUMENT NUMBER: 96185818
TITLE: Protein tyrosine kinases in activation signal of human **basophils** through the immunoglobulin E receptor type I.
AUTHOR: Benhamou M; Feuillard J; Lortholary O; Bourgeois C; Michel L; LeGoff L; Michel A; Mencia-Huerta J M; Lejeune F; Casassus P; Debre P; Arock M
CORPORATE SOURCE: Groupe d'Immuno-Hematologie Moleculaire, Centre National de la Recherche Scientifique, Paris, France.
SOURCE: JOURNAL OF LEUKOCYTE BIOLOGY, (1996 Mar) 59 (3) 461-70.
Journal code: IWY. ISSN: 0741-5400.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals; Cancer Journals
ENTRY MONTH: 199607
AB Human **basophils** activated through high-affinity **immunoglobulin E (IgE) receptors (Fc epsilon** RI) are involved in the late phase of the **allergic** reaction. To investigate the possible involvement of protein-tyrosine kinases in this activation we used human acute basophilic leukemia (ABL) cells in culture as well as a pure population of normal **basophils** in vitro-derived from human bone marrow precursor cells (HBMB). ABL cells were 50-80% **basophils** at various stages of maturation as assessed by staining, morphology, ultrastructure, and flow cytometry analysis, and only **basophils** in ABL cells expressed **Fc epsilon** RI. Aggregation of **Fc epsilon** RI by IgE and anti-IgE, IgE and antigen, or anti-**Fc epsilon** RI **monoclonal antibodies** on ABL cells or on HBMB, led to increased tyrosine phosphorylation of 120-, 100-, 80-, 72-, 50- to 65-, and 38-kDa substrates. Tyrosine phosphorylations in ABL cells were in **basophils** because 1) they were detected after a 5-s stimulation, 2) they were observed under conditions where mediator release is minimal, i.e., in the absence of extracellular calcium, 3) hapten addition during antigen stimulation resulted in almost total disappearance of tyrosine phosphorylations within 30 s. There was correlation between histamine release and tyrosine phosphorylation in anti-IgE dose-responses and in dose-responses of the tyrosine kinase **inhibitor** genistein. The tyrosine kinase p72syk was detected in the cells. Stimulation of ABL cells for 1 min resulted in extracellular calcium-independent tyrosine phosphorylation and activation of p72syk. Therefore, tyrosine kinases are involved in the early steps of human **Fc epsilon** RI signaling in **basophils**. Tyrosine kinases and their substrates could represent new potential therapeutic targets to prevent the development of the **allergic** reaction.

L13 ANSWER 26 OF 76 BIOSIS COPYRIGHT 1999 BIOSIS
ACCESSION NUMBER: 1996:108058 BIOSIS
DOCUMENT NUMBER: PREV199698680193
TITLE: Interleukin-10 **inhibits** cytokine generation from **mast cells**.
AUTHOR(S): Arock, Michel; Zuany-Amorim, Claudia; Singer, Monique; Benhamou, Marc; Pretolani, Marina (1)
CORPORATE SOURCE: (1) Unite Pharmacol. Cell., UA Inst. Pasteur/INSERM no. 285, rue du Dr. Roux, F-75015 Paris France
SOURCE: European Journal of Immunology, (1996) Vol. 26, No. 1, pp. 166-170.
ISSN: 0014-2980.
DOCUMENT TYPE: Article
LANGUAGE: English
AB This report examines the effect of recombinant murine interleukin-10 (rmIL-10) on antigen-induced beta-hexosaminidase, leukotriene (LT)C-4 and cytokine release from mouse bone marrow-derived **mast cells** (BMMC). BMMC sensitized to hapten-**monoclonal** IgE directed against dinitrophenol-bovine serum albumin (DNP-BSA) and challenged with 10 ng/ml DNP-BSA generated beta-hexosaminidase and LTC-4-like material, which was followed by tumor necrosis factor-alpha (TNF-alpha) and granulocyte-macrophage colony-stimulating factor (GMCSF) mRNA expression and protein

release. Incubation of BMMC with 1-100 ng/ml rmIL- 10 **inhibited** cytokine generation, without affecting beta-hexosaminidase and LTC-4-like material release. TNF-alpha, but not GM-CSF mRNA expression, was also diminished in rmIL-10-treated BMMC, suggesting that down-regulation of cytokine production by rmIL-10 involves different mechanisms. These results identify a novel biological action of IL-10 as an **inhibitor** of cytokine production by stimulated **mast cells**.

L13 ANSWER 27 OF 76 MEDLINE DUPLICATE 12
ACCESSION NUMBER: 96354665 MEDLINE
DOCUMENT NUMBER: 96354665
TITLE: Oxatomide **inhibits** the release of proinflammatory mediators from human **basophils** and **mast cells**.
AUTHOR: Patella V; de Crescenzo G; Marino O; Spadaro G; Genovese A; Marone G
CORPORATE SOURCE: Division of Clinical Immunology and Allergy, Faculty of Medicine, University of Naples Federico II, Italy.
SOURCE: INTERNATIONAL ARCHIVES OF ALLERGY AND IMMUNOLOGY, (1996 Sep) 111 (1) 23-9.
Journal code: BJ7. ISSN: 1018-2438.
PUB. COUNTRY: Switzerland
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199612
AB Oxatomide (OXA), a histamine H1 receptor antagonist, is effective in the treatment of patients with **allergic** rhinitis, some **allergic** skin disorders, and bronchial asthma. We have characterized the effect of OXA on the immunologic release of preformed (histamine and tryptase) and de novo synthesized mediators (leukotriene C4:LTC4 and prostaglandin D2:PGD2) from human **basophils** and **mast cells** purified (from 10 to 82%) from human lung parenchyma (HLMC) and skin tissue (HSMC). Preincubation (15 min, 37 degrees C) of **basophils** with OXA (10(-7)-10(-5) M) before Der p I antigen or anti-IgE challenge concentration-dependently (10-40%) **inhibited** the immunologic release of histamine and LTC4. OXA (10(-7)-10(-5) M) also **inhibited** (10-40%) histamine, tryptase and LTC4 release from HLMC activated by anti-IgE. In addition, OXA caused a concentration-dependent **inhibition** of histamine, tryptase and PGD2 release from HSMC immunologically challenged with a **monoclonal antibody** against the alpha chain of the high affinity receptor for IgE (anti-**Fc epsilon** RI) or anti-IgE. These results demonstrate that OXA exerts anti-inflammatory activities by **inhibiting** the release of preformed and de novo synthesized mediators from human **basophils** and **mast cells**.

L13 ANSWER 28 OF 76 MEDLINE
ACCESSION NUMBER: 95403969 MEDLINE
DOCUMENT NUMBER: 95403969
TITLE: Antigen-specific **inhibition** of IgE binding to the high-affinity receptor.
AUTHOR: Stampfli M R; Rudolf M; Miescher S; Pachlopnik J M; Stadler B M
CORPORATE SOURCE: Institute of Immunology and Allergology, University of Bern, Switzerland..
SOURCE: JOURNAL OF IMMUNOLOGY, (1995 Sep 15) 155 (6) 2948-54.
Journal code: IFB. ISSN: 0022-1767.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals; Cancer Journals
ENTRY MONTH: 199512
AB Since the beginning of this century, **allergen** immunotherapy has been widely used to treat **allergic** disorders. In addition to the long-term clinical efficacy of this therapy, there are immediate beneficial effects as observed in rush immunotherapy for which there is no clear mechanism. We investigated the direct impact of an Ag on its specific IgE in terms of IgE measurability in immunoassays and subsequent binding of IgE to the high-affinity receptor for IgE. As a model we used a chimeric IgE specific for NIP that exhibits similar biologic properties as serum or myeloma IgE. To mimic particulate and soluble **allergens** we coupled 15 NIP molecules to BSA. Using this "artificial **allergen**" we could show that the presence of the Ag **reduced** the IgE measurability in immune assays. Furthermore, IgE binding to the **Fc epsilon** RI was 60% **inhibited** in the presence of the Ag shown with an optical biosensor that monitors molecular interactions. In normal **basophils** passively sensitized with IgE that was preincubated with the Ag, no sulfidoleukotriene release could be induced. Rush immunotherapy may invoke a similar phenomenon, resulting in the short-term alteration of symptoms by blocking or substantially **reducing** binding of IgE to its high-affinity receptor. Thus, our result may explain some of the short-term beneficial effects observed in rush immunotherapy.

L13 ANSWER 29 OF 76 MEDLINE
ACCESSION NUMBER: 95164687 MEDLINE
DOCUMENT NUMBER: 95164687
TITLE: Regulation of high-affinity **IgE receptor**-mediated **mast cell** activation by murine low-affinity IgG receptors.
AUTHOR: Daeron M; Malbec O; Latour S; Arock M; Fridman W H
CORPORATE SOURCE: Laboratoire d'Immunologie Cellulaire et Clinique, INSERM U255, Institut Curie, Paris, France.
SOURCE: JOURNAL OF CLINICAL INVESTIGATION, (1995 Feb) 95 (2) 577-85.
Journal code: HS7. ISSN: 0021-9738.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals; Cancer Journals
ENTRY MONTH: 199505
AB **Allergic** symptoms result from the release of granular and lipidic mediators and of cytokines by inflammatory cells. The whole process is initiated by the aggregation of **mast cell** and **basophil** high-affinity **IgE receptors** (**Fc epsilon** RI) by IgE and antigen. We report here that IgE-induced release of mediator and cytokine can be **inhibited** by cross-linking **Fc epsilon** RI to low-affinity IgG receptors (Fc gamma RII) which are constitutively expressed on **mast cells** and **basophils**. Using a model of stable transfectants in RBL-2H3 cells expressing endogeneous rat Fc **epsilon** RI and recombinant murine Fc gamma RII, we showed that **inhibition** requires that **Fc epsilon** RI be crosslinked to Fc gamma RII by the same multivalent ligand. **Inhibition** of cross-linked receptors left non-cross-linked **Fc epsilon** RI capable of triggering mediator release and was reversible upon disengagement. Both isoforms of wild-type Fc gamma RII were equally capable of **inhibiting** **Fc epsilon** RI-mediated **mast cell** activation provided they had an intact intracytoplasmic domain. Our results demonstrate that **mast cell** secretory responses triggered by high-affinity receptors for IgE may be controlled by low-affinity receptors for IgG. This regulation of **Fc epsilon** RI-mediated **mast cell** activation is of potential interest in **mast cell** physiology and in **allergic** pathology.

L13 ANSWER 30 OF 76 BIOSIS COPYRIGHT 1999 BIOSIS DUPLICATE 13
ACCESSION NUMBER: 1996:24825 BIOSIS
DOCUMENT NUMBER: PREV199698596960
TITLE: Effect of the crude drugs (standards of natural drugs not in the J.P. XII) on beta-hexosaminidase release from rat basophilic leukemia (RBL-2H3) cells.
AUTHOR(S): Kataoka, Masahiro (1); Takagaki, Yutaka
CORPORATE SOURCE: (1) Osaka Prefectural Inst. Public Health, 1-3-69, Nakamichi, Higashinari-ku, Osaka 537 Japan
SOURCE: Natural Medicines, (1995) Vol. 49, No. 3, pp. 346-349.
ISSN: 1340-3443.
DOCUMENT TYPE: Article
LANGUAGE: Japanese
SUMMARY LANGUAGE: Japanese; English
AB Immediate **allergy** is caused by chemical mediators released by basophiles and **mast cells** on degranulation due to combination of antigen-immunoglobulin E (IgE) **antibody** complex with the cell-surface **IgE receptor**. The cells of the established cell line, rat basophilic leukemia (RBL-2H3) are known to secrete these chemical mediators under various stimulations. By using the cells of RBL-2H3, we investigated the **inhibitory** effect of water extracts of 67 crude drugs on the biotinyl IgE-avidin complex-induced release of a chemical mediator, beta-hexosaminidase from the cells. The extracts of Malloti Cortex, Plectranthi Herba, Artemisiae Folium, Pogostemoni Herba, Crataegi Fructus, Kaki Calyx, Uncariae Uncis Cum Ramlus, Trapae Fructus, Eriobotryae Folium, Quercus Cortex and Longan Arillus **inhibited** the beta-hexosaminidase release from the cells by more than 50%.

L13 ANSWER 31 OF 76 MEDLINE DUPLICATE 14
ACCESSION NUMBER: 96159699 MEDLINE
DOCUMENT NUMBER: 96159699
TITLE: Evidence for IgG autoantibodies to galectin-3, a **beta-galactoside-binding lectin** (Mac-2, epsilon binding protein, or carbohydrate binding protein 35) in human serum.
AUTHOR: Mathews K P; Konstantinov K N; Kuwabara I; Hill P N; Hsu D K; Zuraw B L; Liu F T
CORPORATE SOURCE: Department of Molecular & Experimental Medicine, Scripps Research Institute, La Jolla, California 92037, USA.
CONTRACT NUMBER: AI32834 (NIAID)
RR00833 (NCRR)
SOURCE: JOURNAL OF CLINICAL IMMUNOLOGY, (1995 Nov) 15 (6) 329-37.
Journal code: HRC. ISSN: 0271-9142.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199605
AB Galectin-3 is a beta-galactoside-binding animal lectin formerly called epsilon protein, Mac-2, carbohydrate binding protein 35, CBH 30, L-29, or L34. The possible occurrence of autoantibodies to galectin-3 was investigated because crosslinking of galectins bound to IgE or **Fc epsilon** RI might produce mediator release from **mast cells** or **basophils**. Unexpectedly, a control serum from an individual free of current **allergic** symptoms was found to have a significantly elevated level of IgG anti-galectin-3 by ELISA employing galectin-3-coated wells incubated with test serum followed by HRPO-conjugated goat anti-human IgG. The reaction was not **inhibitable** by lactose, suggesting that it is not a result of binding of IgG by galectin-3 through lectin-carbohydrate interactions. The **antibody** activity was specifically adsorbed by galectin-3 and protein A-conjugated Sepharose and was associated primarily with subclass IgG1. The presence of the **antibodies** was confirmed by immunoblotting showing binding of IgG to the 30-kD galectin-3 band. The relevant epitopes were in the galectin-3 N-terminal domain. The propositus was subsequently found to have adenocarcinoma of the colon, and titers of IgG anti-galectin-3 were found to be sharply elevated after hemicolectomy. Similar **antibody** titers have not been found in family members, but small numbers of normal persons and patients with malignant neoplasms have been found to have evidence of IgG anti-galectin-3 **antibodies** at lower titers than the propositus. The pathogenesis of this autoimmune reaction is unclear, though there is a trend for it to occur in older persons.

L13 ANSWER 32 OF 76 MEDLINE DUPLICATE 15
ACCESSION NUMBER: 96028104 MEDLINE

DOCUMENT NUMBER: 96028104
TITLE: Multiple defects in the immune system of Lyn-deficient mice, culminating in autoimmune disease.
AUTHOR: Hibbs M L; Tarlinton D M; Armes J; Grail D; Hodgson G; Maglitto R; Stacker S A; Dunn A R
CORPORATE SOURCE: Ludwig Institute for Cancer Research, Melbourne Tumour Biology Branch, Royal Melbourne Hospital, Victoria, Australia..
CONTRACT NUMBER: A1-03958
SOURCE: CELL, (1995 Oct 20) 83 (2) 301-11.
Journal code: CQ4. ISSN: 0092-8674.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals; Cancer Journals
ENTRY MONTH: 199602
AB Mice homozygous for a disruption at the Lyn locus display abnormalities associated with the B lymphocyte lineage and in **mast cell** function. Despite **reduced** numbers of recirculating B lymphocytes, Lyn-/- mice are immunoglobulin M (IgM) hyperglobulinemic. Immune responses to T-independent and T-dependent antigens are affected. Lyn-/- mice fail to mediate an **allergic** response to IgE cross-linking, indicating that activation of LYN plays an indispensable role in **Fc epsilon** RI signaling. Lyn-/- mice have circulating autoreactive **antibodies**, and many show severe glomerulonephritis caused by the deposition of IgG immune complexes in the kidney, a pathology reminiscent of systemic lupus erythematosus. Collectively, these results implicate LYN as having an indispensable role in immunoglobulin-mediated signaling, particularly in establishing B cell tolerance.

L13 ANSWER 33 OF 76 MEDLINE DUPLICATE 16
ACCESSION NUMBER: 95348516 MEDLINE
DOCUMENT NUMBER: 95348516
TITLE: **Allergen**-induced histamine release in rat **mast cells** transfected with the alpha subunits of **Fc epsilon** RI.
AUTHOR: Lowe J; Jardieu P; VanGorp K; Fei D T
CORPORATE SOURCE: Department of BioAnalytical Technology, South San Francisco, CA 94080, USA..
SOURCE: JOURNAL OF IMMUNOLOGICAL METHODS, (1995 Jul 17) 184
(1) 113-22.
Journal code: IFE. ISSN: 0022-1759.
PUB. COUNTRY: Netherlands
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals; Cancer Journals
ENTRY MONTH: 199511
AB A rat **mast cell** histamine assay (RMCHA) has been developed to quantitate the biological activity of a recombinant humanized, **monoclonal** anti-IgE **antibody** (rhuMAbE25). Rat **mast cells** (RBL 48), transfected with the alpha subunit of the high affinity human **IgE receptor (Fc epsilon RI)**, were presensitized for 2 h with human plasma containing IgE specific for ragweed and challenged with ragweed **allergen** in the presence of 50% D2O. Histamine release plateaus at 0.1 micrograms/ml of ragweed. The release of histamine was time, temperature and Ca2+ dependent. This ragweed-induced histamine release could be **inhibited** by rhuMAbE25 in a dose-dependent fashion with an IC50 of 1.19 +/- 0.31 micrograms/ml (n = 25). Other humanized MAbs and recombinant human growth factors neither trigger histamine release nor **inhibit** ragweed-induced histamine release. This RMCHA correlates well with the human **basophil** histamine assay (HBHA) (Fei et al., 1994) with a correlation coefficient of 0.93 (n = 59, p < 0.0001). Histamine was also released when the cells were presensitized with human plasma containing the respective **allergen**-specific IgE and then challenged with standardized mite, D. farinae, house dust mix, standardized cat pelt, or Alternaria tenuis. Comparison of **allergen**-induced histamine release showed a good correlation between RMCHA and HBHA with a correlation coefficient of 0.69 (n = 37, p = 0.0001). We conclude that RMCHA provides a useful tool to confirm **allergen**-specific IgE in **allergic** patients and can be used to evaluate the biological activity of any anti-IgE **monoclonal antibody**. Moreover, RMCHA provides an unique opportunity to study the mechanism of IgE-mediated histamine release in the absence of interfering proteins and growth factors normally present in whole blood.

L13 ANSWER 34 OF 76 MEDLINE DUPLICATE 17
ACCESSION NUMBER: 95337845 MEDLINE
DOCUMENT NUMBER: 95337845
TITLE: Cloning of human anti-IgE autoantibodies and their role in the regulation of IgE synthesis.
AUTHOR: Stadler B M; Stampfli M R; Miescher S; Rudolf M; Vogel M
CORPORATE SOURCE: Institute of Immunology and Allergology, University of Bern, Switzerland.
SOURCE: INTERNATIONAL ARCHIVES OF ALLERGY AND IMMUNOLOGY,
(1995 May-Jun) 107 (1-3) 48-50. Ref: 9
Journal code: BJ7. ISSN: 1018-2438.
PUB. COUNTRY: Switzerland
Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199510
AB In vivo experiments using anti-IgE **antibodies** have clearly documented that they **inhibit** IgE production. In vitro experiments showed that not only IgE synthesis but also the effector phase of the **allergic** response may be influenced, because anti-IgE **antibodies** can prevent **basophil** sensitization with IgE or even remove **IgE-receptor** -bound IgE molecules. However, the question remains whether naturally occurring anti-IgE autoantibodies possess similar biological activity. To generate such **antibodies** for the necessary in vitro studies, we have cloned human Ig variable genes and selected anti-IgE **antibodies** using phage display libraries. Most of the human anti-IgE **antibodies** were anti-idiotypes, but anti-isotypes were also isolated.

L13 ANSWER 35 OF 76 MEDLINE DUPLICATE 18
ACCESSION NUMBER: 94365327 MEDLINE
DOCUMENT NUMBER: 94365327
TITLE: Fibronectin receptor integrins are involved in **mast cell** activation.
AUTHOR: Ra C; Yasuda M; Yagita H; Okumura K
CORPORATE SOURCE: Department of Immunology, Juntendo University, School of Medicine, Tokyo, Japan..
SOURCE: JOURNAL OF ALLERGY AND CLINICAL IMMUNOLOGY, (1994 Sep) 94 (3 Pt 2) 625-8.
Journal code: H53. ISSN: 0091-6749.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals
ENTRY MONTH: 199412
AB **Mast cells** express fibronectin-receptor integrins on the cell surface, which are involved in cellular activation. In this study rat and mouse **mast cells** adhered to fibronectin through very late antigen 4, 5 (beta 1 integrin) and vitronectin receptor (beta 3 integrin), and engagement of these receptors promoted cellular degranulation induced by cross-linking of the high-affinity **IgE receptor**. Blocking of these adhesion molecules by **monoclonal antibodies** remarkably **reduced** passive cutaneous anaphylaxis reaction in vivo. On fibronectin, cytokine release from **mast cells** on **IgE receptor** aggregation was also enhanced, but not the expression of cytokine genes, with the exception of interleukin-3. Interleukin-3 gene expression was constitutively observed in mouse-cultured **mast cells** and significantly increased on fibronectin with a prolonged survival of the cells, suggesting that the autocrine or paracrine system of interleukin-3 secretion contributes to the prolonged survival of **mast cells** on fibronectin. Our findings presented here clearly indicate that the engagement of fibronectin-receptor integrins on **mast cells** increases the sensitivity of the cells for cellular activation. Taking into consideration the fact that **mast cells** in the microenvironment are actually surrounded by other cells and extracellular matrix proteins, we identified significant roles of adhesion molecules on **mast cells** in the **allergic** state, and we hope to develop new strategies to manipulate these molecules for medical intervention in **allergy**.

L13 ANSWER 36 OF 76 BIOSIS COPYRIGHT 1999 BIOSIS DUPLICATE 19
ACCESSION NUMBER: 1994:436546 BIOSIS
DOCUMENT NUMBER: PREV199497449546
TITLE: Leukocyte common antigen (CD45) is required for immunoglobulin E-mediated degranulation of **mast cells**.
AUTHOR(S): Berger, Stuart A. (1); Mak, Tak. W.; Paige, Christopher J.
CORPORATE SOURCE: (1) Dep. Immunology, Univ. Toronto, 160 Wellesley St. East, Toronto, ON M4 1J3 Canada
SOURCE: Journal of Experimental Medicine, (1994) Vol. 180, No. 2, pp. 471-476.
ISSN: 0022-1007.
DOCUMENT TYPE: Article
LANGUAGE: English
AB We demonstrate using primary **mast cell** cultures derived from wild-type and CD45-deficient mice that **mast cell** triggering through the high-affinity immunoglobulin E (**IgE) receptor** requires the cell surface tyrosine phosphatase CD45. Unlike wild-type cells, cross-linking of surface-bound IgE in **mast cells** deficient in CD45 does not induce degranulation. Degranulation in these mutant cells does occur after treatment with the calcium ionophore A23187 indicating that the degranulation machinery is intact in these cells. We also demonstrate that the tyrosine phosphatase **inhibitors** orthoVanadate and perVanadate **inhibit** degranulation in wild-type **mast cells**, as does cross-linking of CD45 by anti-CD45 **antibodies**. Finally, we show that CD45-deficient mice are resistant to IgE-dependent systemic anaphylaxis. These results show that, like the T cell receptor and the antigen receptor on B cells, there is an absolute requirement for CD45 in signaling via the high affinity **IgE receptor**, expanding the number of receptors for which CD45 is an essential component.

L13 ANSWER 37 OF 76 MEDLINE DUPLICATE 20
ACCESSION NUMBER: 95003948 MEDLINE
DOCUMENT NUMBER: 95003948
TITLE: IgE-dependent activation of **Fc epsilon** RII/CD23+ normal human keratinocytes: the role of cAMP and nitric oxide [see comments].
COMMENT: Comment in: J Clin Invest 1995 Jan;95(1):437
AUTHOR: Becherel P A; Mossalayi M D; Le Goff L; Ouaaz F; Dugas B; Guillosson J J; Debre P; Arock M
CORPORATE SOURCE: Molecular Immuno-Hematology Group, CNRS URA 625, Pitie-Salpetri`ere Hospital, Paris, France.
SOURCE: CELLULAR AND MOLECULAR BIOLOGY, (1994 May) 40 (3) 283-90.
Journal code: BNA.
PUB. COUNTRY: France
(DUPLICATE PUBLICATION)
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199501
AB Epidermal keratinocytes (EK) are exposed to multiple inflammatory

stimuli and paracrine factors secreted by various dermal cells (lymphocytes, **mast-cells**, macrophages, fibroblasts) during wounding, cutaneous **allergy** and infections. We have previously demonstrated that following stimulation with interleukin-4 (IL-4) or interferon-gamma, human EK express the low affinity receptor for IgE (**Fc epsilon** RII/CD23) on their surface. In the present study, we showed that the ligation of CD23 by IgE/anti-IgE immune complexes or specific **monoclonal antibody**, induces a dose-dependent release of interleukin-6 and tumor necrosis factor-alpha from EK. CD23-ligation activates the nitric oxide-dependent pathway, as demonstrated by the high levels of nitrites released in cell supernatants, and the accumulation of intracellular cyclic nucleotides in EK. These second messengers are required for IgE-dependent stimulation of cytokine production by these cells, as this is completely abolished by cAMP or NO synthase antagonists. Human epithelial keratinocytes may thus participate in IgE-mediated immune responses, through their ability to express functional CD23 antigen.

L13 ANSWER 38 OF 76 MEDLINE DUPLICATE 21
ACCESSION NUMBER: 95177943 MEDLINE
DOCUMENT NUMBER: 95177943
TITLE: Immunoregulation in **allergy**: the potential of anti-IgE **antibodies** of IL-4 antagonists for the treatment of **allergic** diseases.
AUTHOR: Heusser C
CORPORATE SOURCE: Ciba-Geigy Ltd., Basel, Switzerland..
SOURCE: ARBEITEN AUS DEM PAUL-EHRLICH-INSTITUT (BUNDESAMT FUR SERA UND IMPFSTOFFE) ZU FRANKFURT A.M., (1994) (87) 283-9; discussion 289-91.
Journal code: AEX. ISSN: 0066-5665.
PUB. COUNTRY: GERMANY: Germany, Federal Republic of
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
ENTRY MONTH: 199506
AB IL-4 plays a crucial role in the induction of **allergic** responses, not only in inducing the switch of B cells to the production of IgE **antibodies** but also in promoting the differentiation of T cells to the TH2 phenotype leading to the production of IL-4 and IL-5. Initially, IL-4 may be provided by **basophils** and/or **mast cells** which have been shown to produce IL-4 as a consequence of **IgE receptor**-mediated stimulation. However, after immunization IgE+B cells may persist for a prolonged period leading to further IgE responses which are IL-4-independent. In order to achieve **inhibition** of IgE, independent of the nature of the **allergen** and independent of the state of immunization, non-anaphylactogenic anti-IgE **antibodies** have been generated, which were shown to **inhibit** IgE in vivo without inducing anaphylactic reactions. A corresponding humanized (mouse-human chimeric) anti-human IgE **antibody** has been generated in collaboration between Tanox Biosystems and Ciba. This **antibody** is now under clinical investigation for the potential treatment of **allergic** rhinitis.

L13 ANSWER 39 OF 76 MEDLINE DUPLICATE 22
ACCESSION NUMBER: 95077666 MEDLINE
DOCUMENT NUMBER: 95077666
TITLE: [Regulation of the production of IgE in man]. Regulation de la production des IgE chez l'homme.
AUTHOR: Dessaint J P; Labalette M
CORPORATE SOURCE: Service d'Immunologie, Centre Hospitalier, Faculte de Medecine, Lille..
SOURCE: ALLERGIE ET IMMUNOLOGIE, (1994 Sep) 26 (7) 238-47.
Ref: 43
Journal code: AEI. ISSN: 0397-9148.
PUB. COUNTRY: France
Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, ACADEMIC)
LANGUAGE: French
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199503
AB **Allergy** is associated with elevated production of **allergen**-specific IgE **antibody**. Naive **allergen**-specific B cells undergo a series of molecular interactions before they would produce **allergen**-specific IgE **antibody**. Besides **allergen** recognition, specific B cells have to receive signals from cell-surface proteins and cytokines from their various cellular partners. Activated T cells express a ligand for CD40 that rescues germinal centre B cells from programmed cell death. Contact with follicular dendritic cells or other T and B cells promotes differentiation into plasma through engagement of two pairs of complementary cell-surface proteins, CD21/CD23. Among the many cytokines secreted by helper T cells, interleukin-4 is necessary for the class switch to IgE, and IL-13 also triggers switching to IgE. Then, IgE would participate to feed-back regulation of its production by acting at different levels. When bound to CD23, also known as **Fc epsilon** receptor type II, IgE immune complexes **inhibit** CD21/CD23 cell-cell interactions. When bound to **Fc epsilon** receptor type I on Langerhans' cells in the skin or mucosa, IgE **antibody** enhances **allergen** presentation to T cells and promotes their differentiation into type 2 helper T cells that secrete IL-4 but no interferon-gamma. Local activation of **mast cells** or **basophils**, via their **Fc epsilon** Receptor type I-bound IgE, would trigger secretion of various cytokines, IL-4 in particular, and expression of CD21 and CD40 ligand, which altogether could replace contact with T cells to deliver the co-stimulatory signals for localised IgE production.(ABSTRACT TRUNCATED AT 250 WORDS)

L13 ANSWER 40 OF 76 MEDLINE
ACCESSION NUMBER: 94225108 MEDLINE
DOCUMENT NUMBER: 94225108
TITLE: Anti-IgE autoantibodies in asthma: a diagnostic artefact or an explanation for non-**allergic** asthma?.
AUTHOR: Stadler B M
CORPORATE SOURCE: Institute of clinical immunology, Inselspital, Bern..
SOURCE: REVUE MEDICALE DE LA SUISSE ROMANDE, (1994 Mar) 114 (3) 199-201.
Journal code: SR5. ISSN: 0035-3655.
PUB. COUNTRY: Switzerland
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
ENTRY MONTH: 199408
AB Autoantibodies to IgE can be detected in sera of individuals with atopic disease, but occasionally elevated levels are also found in sera of normal individuals. During the last years we studied therefore the functional properties of such autoantibodies. Depending on the studied in vitro system one can always detect minimally two different **antibody** types. **Antibodies** have been found that either trigger or **inhibit** mediator release from **basophils**, that enhance or **inhibit** binding of IgE to the low **IgE receptor** and either stimulate or **inhibit** human IgE synthesis. Based on such in vitro experiments one may conclude that also in vivo autoantibodies exist that either neutralize IgE or have no effect on IgE mediated clinical events. Thus, anti-IgE autoantibodies may hide IgE as for example in those bee sting **allergic** individuals where we could not detect specific IgE but found IgE hidden within immune complexes, suggesting that the biological activity of IgE was not neutralized. A similar phenomenon may exist in asthmatic individuals. In a recent study we found that non-atopic asthmatic children had indeed low levels of serum IgE, but showed the same levels of autoantibodies to IgE, against suggesting that IgE was hidden within immune complexes. Thus, our ongoing research addresses the question whether in diseases of unclear atopic origin IgE may nevertheless play a critical role but based on possible artefacts in the IgE detection assays some of the clinically relevant IgE may escape.

L13 ANSWER 41 OF 76 BIOSIS COPYRIGHT 1999 BIOSIS
ACCESSION NUMBER: 1994:309636 BIOSIS
DOCUMENT NUMBER: PREV199497322636
TITLE: A novel bioactivity assay for **monoclonal antibodies** directed against IgE.
AUTHOR(S): Fei, David Tai Wai (1); Lowe, John; Jardieu, Paula
CORPORATE SOURCE: (1) Dep. Bioanalytical Technol., 460 Point San Bruno Blvd., South San Francisco, CA 94080 USA
SOURCE: Journal of Immunological Methods, (1994) Vol. 171, No. 2, pp. 189-199.
ISSN: 0022-1759.
DOCUMENT TYPE: Article
LANGUAGE: English
AB A novel bioactivity assay has been developed to quantitate the biological activity of a humanized, **monoclonal** anti-IgE **antibody** (rhuMAbE25) in human whole blood. Heparinized blood specimens from prescreened healthy donors were sensitized for 2 h with a constant amount of human plasma containing IgE specific for ragweed and then challenged with ragweed **allergen**. Histamine was released in a dose-dependent fashion and reached plateau levels after 30 min. As expected, the release of histamine by ragweed **allergen** was time, temperature and Ca-2+ dependent, and could be enhanced by the presence of 33% deuterium oxide. **Allergen**-triggered release could be **inhibited** by rhuMAbE25 with an effective dose range from 0.1 to 1 mu-g/ml. Preincubation with other humanized MAbs, which exhibit 95% homology to rhuMAbE25 but differ in epitope specificity, failed to **inhibit** the ragweed-induced histamine release. Overall, this bioactivity assay has a low interassay variability (%CV) of 17% (n = 23) and can be readily modified to determine if rhuMAbE25 or other anti-**allergy** therapeutics are capable of blocking histamine release elicited by other **allergens**. Moreover, the assay can be used to confirm IgE-mediated **allergic** responses and to provide early information regarding safety and potential efficacy of therapeutics aimed at blocking IgE dependent responses.

L13 ANSWER 42 OF 76 WPIDS COPYRIGHT 1999 DERWENT INFORMATION LTD
ACCESSION NUMBER: 93-215448 [27] WPIDS
DOC. NO. CPI: C93-095520
TITLE: New anti-human immunoglobulin E **monoclonal antibodies** - for treatment of **allergic** diseases, and isolation, analysis and diagnosis.
DERWENT CLASS: B04 D16
INVENTOR(S): WASHIDA, N; YOSHIDA, T
PATENT ASSIGNEE(S): (SNOW) SNOW BRAND MILK PROD CO LTD
COUNTRY COUNT: 16
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
EP 550020	A2	930707 (9327)*		EN	19
R: AT BE CH DE DK ES FR GB IT LI NL SE					
JP 05199895	A	930810 (9336)			12
CA 2086131	A	930625 (9337)			
ZA 9210006	A	930825 (9340)			38
EP 550020	A3	940824 (9531)			
US 5625039	A	970429 (9723)			15
EP 550020	B1	970827 (9739)		EN	19
R: AT BE CH DE DK ES FR GB IT LI NL SE					
DE 69221845	E	971002 (9745)			
ES 2106815	T3	971116 (9801)			

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
EP 550020	A2	EP 92-121934	921223
JP 05199895	A	JP 91-357005	911224
CA 2086131	A	CA 92-2086131	921223
ZA 9210006	A	ZA 92-10006	921223
EP 550020	A3	EP 92-121934	921223
US 5625039	A Cont of	US 92-994503	921221

US 94-336569 941109
EP 550020 B1 EP 92-121934 921223
DE 69221845 E DE 92-621845 921223
EP 92-121934 921223
ES 2106815 T3 EP 92-121934 921223

FILING DETAILS:

PATENT NO	KIND	PATENT NO
DE 69221845 E	Based on	EP 550020
ES 2106815 T3	Based on	EP 550020

PRIORITY APPLN. INFO: JP 91-357005 911224
AB EP 550020 A UPAB: 931116
The anti-human immunoglobulin E (IgE) **monoclonal antibodies** (MAbs) specifically bind to human IgE. They have the following properties: (a) a mol. wt. of 150,000 detd. by SDS-PAGE (non-**reduced** state), (b) bind to human IgE-producing B cells, (c) recognise IgE bound to human or canine cells having an **Fc epsilon** receptor.
The MAb-producing cells were obtd. using IgE **antibody** as immunogen. Pref. human derived purified IgE **antibody** is obtd. from sera of autoimmune disease patients or from culture supernatant of IgE-producing cells.
USE/ADVANTAGE - The MAbs recognise and dissociate IgE bound to Fe epsilon receptors on the surface of **mast cells** and **basophils** and **inhibit** the release of chemical mediators from these cells. The MAbs can be used for the treatment of **allergic** diseases. Furthermore, the MAbs can be used for the selective isolation and analysis of IgE and for diagnosis.
Dwg.0/7

L13 ANSWER 43 OF 76 MEDLINE DUPLICATE 23
ACCESSION NUMBER: 93367111 MEDLINE
DOCUMENT NUMBER: 93367111
TITLE: Effect of anthelmintic treatment on the **allergic** reactivity of children in a tropical slum.
AUTHOR: Lynch N R; Hagel I; Perez M; Di Prisco M C; Lopez R; Alvarez N
CORPORATE SOURCE: Institute of Biomedicine, Central University of Venezuela, Caracas..
SOURCE: JOURNAL OF ALLERGY AND CLINICAL IMMUNOLOGY, (1993 Sep) 92 (3) 404-11.
Journal code: H53. ISSN: 0091-6749.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals
ENTRY MONTH: 199312
AB It is well known that helminthic infection can cause a polyclonal stimulation of the synthesis of IgE, which is dependent on interleukin-4 (IL-4) production, and it has been suggested that this can modulate the expression of **allergic** reactivity in tropical populations. We evaluated the effect of regular anthelmintic treatment, for a period of 22 months, on certain aspects of the **allergic** reactivity of children in a slum area of Caracas, Venezuela, where helminths are endemic. The treatment (Oxantel-Pyrantel; Quantrel) effectively eliminated intestinal helminthic infection and resulted in a significant decrease in the initially elevated total serum IgE levels. IL-4 was detectable in the serum, and a significant **reduction** in IL-4 was also observed after treatment. In contrast, both the immediate-hypersensitivity skin-test reactivity and serum levels of specific IgE **antibody** against environmental **allergens** were markedly increased in the treated children. In a group of children who were also evaluated in the same slum, but who declined treatment, a substantial increase in helminthic infection occurred, which was related to an acute deterioration of the socioeconomic conditions of Venezuela over the course of our study period. This was paralleled by a considerable increase in total IgE levels in these children and a decrease in the skin-test reactivities and specific IgE levels. The application of Prausnitz-Kustner passive transfer tests and analysis of specific IgE **antibody** levels indicated that the polyclonal stimulation of IgE synthesis by helminthic parasites results in **mast cell Fc epsilon** receptor saturation and suppression of specific IgE **antibody** synthesis. This **inhibition** of **allergic** reactivity is reversible by anthelmintic treatment.

L13 ANSWER 44 OF 76 BIOSIS COPYRIGHT 1999 BIOSIS
ACCESSION NUMBER: 1993:383611 BIOSIS
DOCUMENT NUMBER: PREV199396058911
TITLE: **Allergic** reactivity of children of different socioeconomic levels in tropical populations.
AUTHOR(S): Hagel, Isabel; Lynch, Neil R.; Diprisco, Maria C.; Lopez, Reina I.; Garcia, Nancy M.
CORPORATE SOURCE: Instituto Biomedicina, Aptdo 4043, Caracas Venezuela
SOURCE: International Archives of Allergy and Immunology, (1993) Vol. 101, No. 2, pp. 209-214.
ISSN: 1018-2438.
DOCUMENT TYPE: Article
LANGUAGE: English
AB Widely variable prevalences of **allergic** diseases have been reported in tropical populations, and this has been suggested to be due to effects of the nonspecific polyclonal stimulation of IgE synthesis caused by the helminthic infections that are endemic in these areas. Since 1980, we have been evaluating the **allergic** reactivity of different socioeconomic sectors of the population of tropical Venezuela (lat. 2-12 degree N), and in the present study analyze the overall results obtained in the laboratory evaluation of children (5-15 years of age) belonging to these groups. Children of medium-high socioeconomic level (M-HSEL), who experience occasional helminthic infections, have moderately high total serum IgE levels, and have elevated skin test positivities and specific IgE levels against environmental **allergens**. Persons of low socioeconomic level, in the urban, and particularly rural situation experience frequent helminthic infection, and have highly elevated total serum IgE levels. In contrast to the M-HSEL, the majority of these children have detectable specific IgE **antibody** against a variety of inhalant **allergens**, but relatively few have high levels, and their skin test positivity is also low. In these frequently parasitized persons, evidence of saturation of **mast cell Fc-epsilon** receptors was found by tests of passive sensitization. We propose, therefore, that helminthic parasites have a biphasic effect on **allergic** reactivity; occasional infections are stimulatory, via their nonspecific potentiation of IgE synthesis against environmental **allergens**, and frequent infections are suppressive due to the widely polyclonal stimulation that they cause, resulting in both diminished specific **antibody** production against any given **allergen** and **mast cell Fc-epsilon** receptor saturation.

L13 ANSWER 45 OF 76 MEDLINE DUPLICATE 24
ACCESSION NUMBER: 92291514 MEDLINE
DOCUMENT NUMBER: 92291514
TITLE: Anti-human IgG causes **basophil** histamine release by acting on IgG-IgE complexes bound to **IgE receptors**.
AUTHOR: Lichtenstein L M; Kagey-Sobotka A; White J M; Hamilton R G
CORPORATE SOURCE: Department of Medicine, Johns Hopkins University School of Medicine, Baltimore, MD 21224.
CONTRACT NUMBER: AI07290 (NIAID)
SOURCE: JOURNAL OF IMMUNOLOGY, (1992 Jun 15) 148 (12) 3929-36.
Journal code: IFB. ISSN: 0022-1767.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals; Cancer Journals
ENTRY MONTH: 199209
AB We have reexamined the ability of anti-human IgG **antibodies** to induce histamine release from human **basophils**. A panel of purified murine mAbs with International Union of Immunological Societies-documented specificity for each of the four subclasses of human IgG was used. Of the 24 **allergic** subjects studied, the **basophils** of 75% (18/24) released greater than 10% histamine to one or more anti-IgG1-4 mAb, whereas none of the 13 nonatopic donor's **basophils** released histamine after stimulation with optimal amounts of anti-IgG mAb. The **basophils** of 85% (11/13) of the nonatopic donors did respond to anti-IgE challenge, as did 92% (22/24) of the atopic donor cells. Histamine release was induced most frequently by anti-IgG3, and 10/18 anti-IgG responder cells released histamine with mAb specific for two or more different subclass specificities. The rank order for induction of histamine release was anti-IgG3 greater than anti-IgG2 greater than IgG1 greater than anti-IgG4. As in our previous study using polyclonal anti-IgG, 100- to 300-micrograms/ml quantities of the anti-IgG mAb were required for maximal histamine release, about 1000-fold higher than those for comparable release with anti-human IgE. Specificity studies using both immunoassays and **inhibition** studies with IgE myeloma protein indicated that anti-IgG induced histamine release was not caused by cross-reactivity with IgE. Ig receptors were opened by lactic acid treatment so that the cells could be passively sensitized. Neither IgE myeloma nor IgG myeloma (up to 15 mg/ml) proteins could restore the response to anti-IgG mAb. However, sera from individuals with leukocytes that released histamine upon challenge with anti-IgG mAb could passively sensitize acid-treated leukocytes from both anti-IgG responder and nonresponder donors for an anti-IgG response. The only anti-IgG mAb that induced release from these passively sensitized cells were those to which the serum donor was responsive. Sera from non-IgG responders could not restore an anti-IgG response. These data led to the hypothesis that the IgG specific mAb were binding to IgG-IgE complexes that were attached to the **basophil** through IgE bound to the **IgE receptor**. This was shown to be correct because passive sensitization to anti-IgG could be blocked by previous exposure of the **basophils** to IgE. We conclude that anti-IgG-induced release occurs as a result of binding to IgG anti-IgE **antibodies** and cross-linking of the **IgE receptors** on **basophils**.

L13 ANSWER 46 OF 76 EMBASE COPYRIGHT 1999 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 92337064 EMBASE
TITLE: IgE-mediated **allergy** and Fc. **epsilon**. receptor II.
AUTHOR: Suemura M.
CORPORATE SOURCE: Department of Medicine III, Osaka University Medical School, 1-1-50 Fukushima, Fukushima-ku, Osaka City 553, Japan
SOURCE: JPN. J. THORAC. DIS., (1992) 30/8 (1427-1433).
ISSN: 0301-1542 CODEN: NKYZA2
COUNTRY: Japan
DOCUMENT TYPE: Journal
FILE SEGMENT: 015 Chest Diseases, Thoracic Surgery and Tuberculosis
026 Immunology, Serology and Transplantation
029 Clinical Biochemistry
LANGUAGE: Japanese
SUMMARY LANGUAGE: Japanese; English
AB Two types of **IgE receptors**, Fc. **epsilon**. receptor I (**Fc.epsilon**.RI) and **Fc.epsilon**.RII), are known to be involved in IgE-mediated **allergy**. **Fc.epsilon**.RI is expressed on **mast cells** and **basophils**, and cross-linkage of **Fc.epsilon**.RI leads to the release of chemical mediators from these cells. Fc. **epsilon**.RI consists of .alpha., .beta. and .gamma. chains, and cDNAs encoding these chains were recently cloned. Fc. **epsilon**.RII is expressed on various cells such as mature .mu.+.delta.+ B cells and activated monocytes and eosinophils. The cDNA encoding B cell **Fc.epsilon**.RII was cloned

by several groups including ours, and Fc.epsilon .RII was found to be a single chain receptor expressed with its N-terminal inside the cells, homologous to C-type animal lectins. Subsequently, we identified two species of Fc. epsilon.RII, Fc.epsilon.RIIa and Fc.epsilon.IIb, whose structures differ only at the N-terminal cytoplasmic region but share the same C-terminal extracellular region. These two receptors are generated utilizing different transcriptional initiation sites and 5' exons. Fc .epsilon.RIIa is constitutively expressed only on B cells. While Fc.epsilon.RIIb is inducible by IL-4 on B cells, monocytes and eosinophils. By employing transformants expressing Fc.epsilon.RIIa or Fc. epsilon.RIIb, it was demonstrated that Fc. epsilon.RIIa is involved in IgE-mediated endocytosis, whereas Fc.epsilon.RIIb functions in IgE-dependent phagocytosis. The C-terminal extracellular region of Fc.epsilon.RII is cleaved as a result of proteolysis, and released from cells as soluble Fc. epsilon.RII (sFc.epsilon.RII) with MW of 37, 33 and 25kDa. Since sFc.epsilon.RII secretion is regulated by IL-4 and IFNs, which are also responsible for the regulation of IgE antibody responses, sFc.epsilon.RII level in the serum may reflect the in vivo activities of these lymphokines. This possibility was assessed in various allergic diseases, following the clinical courses. It was found that serum sFc.epsilon.RII decreased following drug treatment or reduction of airborne allergens in parallel with clinical improvement, suggesting that sFc.epsilon.RII level in serum may be a good indicator of allergic disease. Then, in order to analyze the functions of sFc.epsilon.RII in allergy, we prepared recombinant sFc.epsilon.RII (25kDa). It showed an inhibitory effect on IgE-binding as well as IgE-mediated release of chemical mediators from cells expressing Fc.epsilon.RII or Fc.epsilon.RI. On the other hand, purified sFc.epsilon.RII (33kDa) exerted an enhancing effect on IL-4-induced IgE responses. Thus, sFc.epsilon.RII of different molecular sizes may function in various phases of IgE-mediated allergic reactions.

L13 ANSWER 47 OF 76 MEDLINE
ACCESSION NUMBER: 92235616 MEDLINE
DOCUMENT NUMBER: 92235616
TITLE: Epidermal Langerhans cells from normal human skin bind monomeric IgE via Fc epsilon RI.
AUTHOR: Wang B; Rieger A; Kilgus O; Ochiai K; Maurer D; Fodinger D; Kinet J P; Stingl G
CORPORATE SOURCE: Department of Dermatology I, University of Vienna Medical School, Austria..
SOURCE: JOURNAL OF EXPERIMENTAL MEDICINE, (1992 May 1) 175 (5) 1353-65.
Journal code: I2V. ISSN: 0022-1007.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals; Cancer Journals
ENTRY MONTH: 199207
AB Human epidermal Langerhans cells (LC) bearing IgE are found in disease states associated with hyperimmunoglobulinemia E. When studying the mechanism(s) underlying this phenomenon, immunohistology revealed that a majority of epidermal LC from normal skin of healthy individuals can specifically bind monomeric IgE. IgE binding to LC could neither be prevented by preincubation of the tissue with monoclonal antibodies (mAb) against either Fc epsilon RII/CD23 or Fc gamma RII/CD32, nor by the addition of lactose. However, binding could be entirely abrogated by preincubation with the anti-Fc epsilon RI alpha mAb 15-1, which interferes with IgE binding to Fc epsilon RI alpha gamma transfectants. These observations indicated that IgE binding to epidermal LC is mediated by Fc epsilon RI rather than by CD23, CD32, or the D-galactose-specific IgE-binding protein. This assumption gained support from our additional findings that: (a) the majority of LC exhibited distinct surface immunolabeling with the anti-Fc epsilon RI alpha mAbs 15-1 and 19-1, but not with any of eight different anti-Fc epsilon RII/CD23 mAbs; and (b) transcripts for the alpha, beta, and gamma chains of Fc epsilon RI could be amplified by polymerase chain reaction from RNA preparations of LC-enriched, but not of LC-depleted, epidermal cell suspensions. In view of the preeminent role of Fc epsilon RI crosslinking on mast cells and basophils in triggering the synthesis and release of mediators of allergic reactions, the demonstration of this receptor on epidermal LC may have important implications for our understanding of allergic reactions after epicutaneous contact with allergens.

L13 ANSWER 48 OF 76 BIOSIS COPYRIGHT 1999 BIOSIS
ACCESSION NUMBER: 1993:4974 BIOSIS
DOCUMENT NUMBER: PREV199395004974
TITLE: Phosphatidylcholine-specific phospholipase D-derived 1,2-diacylglycerol does not initiate protein kinase C activation in the RBL 2H3 mast-cell line.
AUTHOR(S): Lin, Peiyuan; Fung, Wen-Jian C.; Gilfillan, Alasdair M. (1)
CORPORATE SOURCE: (1) Dep. Pharmacol., Hoffmann-La Roche, Nutley, N.J. 07110 USA
SOURCE: Biochemical Journal, (1992) Vol. 287, No. 1, pp. 325-331. ISSN: 0264-6021.
DOCUMENT TYPE: Article
LANGUAGE: English
AB We examined the role of phosphatidylcholine-specific phospholipase D (PC-PLD) in the IgE-dependent activation of protein kinase C (PKC) in RBL 2H3 cells (a model for mast-cell function). Cells were sensitized with mouse monoclonal anti-trinitrophenol (TNP) IgE (0.5 mu-g/ml) and were then triggered with an optimal concentration (10 ng/ml) of TNP-ovalbumin conjugate (TNP-OVA). This resulted in an immediate biphasic increase in the production of 1,2-diacylglycerol (DAG) and activation of PKC. The initial increase in DAG production reached a peak within 30 s, and the second phase reached a plateau within 5 min after stimulation. TNP-OVA-induced PC-PLD activation followed the initial increase in DAG formation in response to IgE-receptor cross-bridging, but coincided with the second peak. Phosphatidic acid (PA), derived from the PC-PLD pathway, is metabolized to DAG by the action of PA phosphohydrolase (PAPase). Propranolol (0.3 mM), which inhibits PAPase, blocked the IgE-dependent increase in DAG, activation of PKC, and subsequently degranulation. The PKC inhibitor staurosporine (0.1 mu-M) inhibited the second, but not first, peak of DAG accumulation, reversed PKC translocation after 10 min and inhibited subsequent mediator release. Taken together, these results demonstrate that PC-PLD does not initiate, but may play a latent role in, IgE-dependent DAG production, PKC activation and mediator release from RBL 2H3 cells.

L13 ANSWER 49 OF 76 MEDLINE DUPLICATE 25
ACCESSION NUMBER: 92037520 MEDLINE
DOCUMENT NUMBER: 92037520
TITLE: Immunologically activated chloride channels involved in degranulation of rat mucosal mast cells.
AUTHOR: Romanin C; Reinsprecht M; Pecht I; Schindler H
CORPORATE SOURCE: Institute for Biophysics, University of Linz, Austria..
SOURCE: EMBO JOURNAL, (1991 Dec) 10 (12) 3603-8.
Journal code: EMB. ISSN: 0261-4189.
PUB. COUNTRY: ENGLAND: United Kingdom
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199202
AB Crosslinking of type I Fc epsilon receptors (Fc epsilon RI) on the surface of basophils or mast cells initiates a cascade of processes leading to the secretion of inflammatory mediators. We report here a correlation between mediator secretion and the activation of Cl- channels in rat mucosal-type mast cells (line RBL-2H3). Stimulation of RBL cells by either IgE and antigen or by a monoclonal antibody specific for the Fc epsilon RI, resulted in the activation of Cl- ion channels as detected by the patch-clamp technique. Channel activation occurred slowly, within minutes after stimulation. The channel has a slope conductance of 32 pS at potentials between 0 and -100 mV, and an increasing open-state probability with increasing depolarization. Activation of apparently the same Cl- channels could be mimicked without stimulation by isolating inside-out membrane patches in tyrode solution. Parallel inhibition of both Cl- channel activity and mediator secretion, as monitored by serotonin release, was observed by two compounds, the Cl- channel blocker 5-nitro-2-(3-phenylpropylamino) benzoic acid (NPPB) and the anti-allergic drug cromolyn. NPPB inhibited both the antigen-induced Cl- current and the serotonin release, where half-maximal inhibition occurred at similar doses, at 52 microM and 77 microM, respectively. The drug cromolyn, recently found to inhibit immunologically induced mediator secretion from RBL cells upon intracellular application, also blocks Cl- channels (IC50 = 15 microM) when applied to the cytoplasmic side of an inside-out membrane patch. The observed Cl- channel activation upon immunological stimulation and the parallel inhibition of channel current and of serotonin release suggests a functional role for this Cl- channel in mediator secretion from the mast cells studied.

L13 ANSWER 50 OF 76 MEDLINE DUPLICATE 26
ACCESSION NUMBER: 92183237 MEDLINE
DOCUMENT NUMBER: 92183237
TITLE: Effects of metal elements on beta-hexosaminidase release from rat basophilic leukemia cells (RBL-2H3).
AUTHOR: Tanaka Y; Takagaki Y; Nishimune T
CORPORATE SOURCE: Osaka Prefectural Institute of Public Health, Japan.
SOURCE: CHEMICAL AND PHARMACEUTICAL BULLETIN, (1991 Aug) 39 (8) 2072-6.
Journal code: CZP. ISSN: 0009-2363.
PUB. COUNTRY: Japan
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
ENTRY MONTH: 199206
AB Immediate allergy is caused by a chemical mediator released from basophile and mast cells via cell degranulation due to reaction between an immunoglobulin E (IgE) antibody, bound with the IgE receptor on the cell membrane, and an antigen. The present authors have established a new method for assaying the enzyme activity of beta-hexosaminidase as an index of chemical mediator release. Using cultured cells instead of conventional methods based on histamine release from mast cells, the present method permits highly accurate mass screening since it uses a well-established cell line of rat basophilic leukemia cells (RBL-2H3). The effects of metal elements on immediate allergic reaction were evaluated using a newly developed assay system. A total of 38 metal elements were investigated for effects on immediate allergic reactions in vitro. These elements were classified by five types on the basis of action on beta-hexosanimidase release: 1) those which showed very strong inhibitory action, such as ZnCl2 and ZrCl4, 2) those which showed relatively strong inhibitory action, such as CdCl2 and CuCl2, 3) those which showed relatively weak inhibitory action, such as CoCl2 and Pb(NO3)2, 4) those which showed neither inhibitory nor promoting action, such as MnCl2 and SrCl2, and 5) AgNO3, which alone showed promoting action.

L13 ANSWER 51 OF 76 MEDLINE DUPLICATE 27
ACCESSION NUMBER: 91184268 MEDLINE

DOCUMENT NUMBER: 91184268
TITLE: Expression and biological effects of high levels of serum IgE in epsilon heavy chain transgenic mice.
AUTHOR: Adamczewski M; Kohler G; Lamers M C
CORPORATE SOURCE: Max-Planck-Institut fur Immunbiologie, Freiburg, FRG..
SOURCE: EUROPEAN JOURNAL OF IMMUNOLOGY, (1991 Mar) 21 (3) 617-26.
Journal code: EN5. ISSN: 0014-2980.
PUB. COUNTRY: GERMANY: Germany, Federal Republic of
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals; Cancer Journals
ENTRY MONTH: 199107
AB We have generated and examined transgenic mice carrying a rearranged immunoglobulin transgene coding for the heavy chain of an IgE **antibody**. These mice produce the secreted form of the recombinant epsilon heavy chain. Serum IgE levels were increased at least 100-fold over control values. Transgenic epsilon mRNA was detected in spleen and thymus, not in liver and heart. Transgenic epsilon production in vitro was slightly up-regulated by T cells, but not affected by interleukin 4 in vitro or Nippostrongylus infestation in vivo. The B cell and T cell compartments and antigen-specific IgE, IgG1 and IgM responses as well as the increase in endogenous IgE after Nippostrongylus infestation in transgenic mice were normal. These data indicate that the presence of high levels of transgenic IgE did not induce class-specific suppressive mechanisms. Transgenic IgE bound to **Fc epsilon** receptor type I and **Fc epsilon** receptor type II and mediated histamine release from **mast cells** in vitro and an **allergic** skin reaction in vivo. It **inhibited** an ovalbumin-specific skin reaction in ovalbumin-immunized transgenic mice only during the initial phases of the immune response. This result has a bearing on the feasibility of immune therapy of **allergic** diseases with substances that block binding of IgE to its receptors.

L13 ANSWER 52 OF 76 BIOSIS COPYRIGHT 1999 BIOSIS
ACCESSION NUMBER: 1992:91401 BIOSIS
DOCUMENT NUMBER: BA93:47951
TITLE: EFFECTS OF FOOD ADDITIVES ON BETA HEXOSAMINIDASE RELEASE FROM RAT BASOPHILIC LEUKEMIA CELLS RBL-2H3.
AUTHOR(S): TANAKA Y; TAKAGAKI Y; NISHIMUNE T
CORPORATE SOURCE: OSAKA PREFECTURA INST. PUBLIC HEALTH, 3-69 NAKAMICHI 1-CHOME, HIGASHINARI-KU, OSAKA 537, JPN.
SOURCE: EISEI KAGAKU, (1991) 37 (5), 370-378.
CODEN: ESKGA2. ISSN: 0013-273X.
FILE SEGMENT: BA; OLD
LANGUAGE: English
AB An immediate **allergic** response is caused by a chemical mediator released from **basophil** and **mast cells** via a cell degranulation due to a reaction between an IgE **antibody**, bound with the **IgE receptor** on the cell membrane, and an antigen. Using cultured cells instead of conventional methods based on histamine release from **mast cells**, the assay method in the present study permits highly accurate mass screening, since it uses a well-established cell line of rat basophilic leukemia cells (RBL-2H3), and determines by colorimetry the enzyme activity of .beta.-hexosaminidase as an index of chemical mediator release. Effects of food additives on the immediate **allergic** reaction were evaluated using a newly developed assay system. A total of 100 food additives were investigated for their effects on .beta.-hexosaminidase release from RBL-2H3 cells. Most of the additives showed no action; zinc sulfate, zinc gluconate, copper sulfate, eugenol, cinnamaldehyde, ammonium persulfate, thiabendazole, ethyl and propyl p-hydroxybenzoates and aluminium sulfates **inhibited allergic** reaction; butylated hydroxy toluene and butylated hydroxy anisol promoted reaction and was attributed to their action of injurying the cells.

L13 ANSWER 53 OF 76 MEDLINE
ACCESSION NUMBER: 92170644 MEDLINE
DOCUMENT NUMBER: 92170644
TITLE: IPD-1151T: a prototype drug for IgE **antibody** synthesis modulation.
AUTHOR: Koda A; Yanagihara Y; Matsuura N
CORPORATE SOURCE: Department of Pharmacology, Gifu Pharmaceutical University, Japan..
SOURCE: AGENTS AND ACTIONS. SUPPLEMENTS, (1991) 34 369-78.
Journal code: 2YH. ISSN: 0379-0363.
PUB. COUNTRY: Switzerland
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199206
AB IPD-1151T [(+/-)-[2-[4-(3-ethoxy-2-hydroxypropoxy)phenylcarbamoyl]-ethyl] dimethylsulfonium p-toluenesulfonate] **inhibits** not only antigen-induced histamine release from **mast cells** but also IgE **antibody** formation. The present paper describes the **inhibitory** effect of IPD-1151T on the IgE **antibody** formation. The IgE **antibody** formation in BALB/c mice which had been immunized with dinitrophenylated ascaris extract (DNP.As) plus alum was **inhibited** dose-dependently by IPD-1151T given p.o. The formations of anti-DNP.IgM and IgG **antibodies**, however, were unaffected in this case. Ongoing IgE **antibody** formation was also **inhibited** by this agent. The total IgE in sera of atopic patients including asthma and atopic dermatitis showed a tendency to decrease when IPD-1151T was given p.o. for 6 to 12 weeks, though the titer of specific IgE **antibody** against Dermatophagoides pteronyssinus or D. farinae clearly decreased. In these cases, the ratio of B cell expressing low-affinity Fc receptor for IgE (**Fc epsilon** RII) also decreased. Antigen-induced production of interleukin 4 (IL-4) from a helper T-cell line (TCL) prepared from peripheral blood lymphocytes of an **allergic** patient sensitive to Japanese cedar pollen was **reduced** with the addition of IPD-1151T. This agent also decreased antigen-induced IgE synthesis by autologous B cell concomitant with the TCL and antigen presenting cell. The consideration was done on the mechanism regarding the **inhibition** of IgE **antibody** formation by IPD-1151T.

L13 ANSWER 54 OF 76 EMBASE COPYRIGHT 1999 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 91331086 EMBASE
TITLE: Pharmacological modulation of the antigen-induced expression of the low-affinity **IgE receptor** (**Fc.epsilon** .RII/CD23) on rat alveolar macrophages.
AUTHOR: Mencia-Huerta J.M.; Dugas B.; Boichot E.; Petit-Frere C.; Paul-Eugene N. Lagente V.; Capron M.; Liu F.-T.; Braquet P.
CORPORATE SOURCE: Departement d'Immunologie, Institut Henri Beaufour, 1 Avenue des Tropiques, F-9 1952 Les Ulis, France
SOURCE: INT. ARCH. ALLERGY APPL. IMMUNOL., (1991) 94/1-4 (295-298).
ISSN: 0020-5915 CODEN: IAAAAM
COUNTRY: Switzerland
DOCUMENT TYPE: Journal
FILE SEGMENT: 026 Immunology, Serology and Transplantation
029 Clinical Biochemistry
030 Pharmacology
037 Drug Literature Index
LANGUAGE: English
SUMMARY LANGUAGE: English
AB Brown-Norway (BN) rats were sensitized by 3 aerosol exposures to ovalbumin (OA; 10 mg/ml) at days 1, 3 and 14. At day 21, the rats were challenged with the antigen or vehicle by aerosol. Alveolar macrophages (AM) were obtained by bronchoalveolar lavage and the expression of **Fc.epsilon**.RII/CD23 was assessed by flow cytometry after staining with the **BB10 monoclonal antibody**. A maximum of 74% of the AM from sensitized and challenged BN rats expressed **FC.epsilon**.RII/CD23 24 h after OA exposure, compared to 12% of the cells from rats exposed to vehicle. Sprague-Dawley rats were passively sensitized by intravenous injection of 0.1 or 0.05 ml/kg mouse ascitic fluid containing dinitrophenyl (DNP)-specific **monoclonal** IgE (2682-1) and after 24 h exposed to an aerosol of 5 mg/ml of DNP-bovine serum albumin for 30 min. In this case also, antigen exposure induced the expression of **Fc.epsilon** .RII/CD23 on 75% AM, compared to 17% AM from saline-challenged rats. Such an induction of **Fc.epsilon**.RII/CD23 on AM was, however, not observed when the animals were challenged with either histamine, serotonin or acetylcholine by aerosol. The antigen-induced expression of **Fc.epsilon** .RII/CD23 on AM was **inhibited** upon treatment of the rats with ketotifen or beclomethasone. In addition, oral or aerosol administration of respectively BN 50730 or BN 52021 (two structurally unrelated platelet-activating factor antagonists), **inhibited** the antigen-induced **Fc.epsilon** .RII/CD23 expression on AM, indicating the participation of this lipid mediator in this process.

L13 ANSWER 55 OF 76 MEDLINE
ACCESSION NUMBER: 91114691 MEDLINE
DOCUMENT NUMBER: 91114691
TITLE: Mapping of the high affinity **Fc epsilon** receptor binding site to the third constant region domain of IgE.
AUTHOR: Nissim A; Jouvin M H; Eshhar Z
CORPORATE SOURCE: Department of Chemical Immunology, Weizmann Institute of Science, Rehovot, Israel.
SOURCE: EMBO JOURNAL, (1991 Jan) 10 (1) 101-7.
Journal code: EMB. ISSN: 0261-4189.
PUB. COUNTRY: ENGLAND: United Kingdom
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199105
AB Identification of the precise region(s) on the IgE molecule that take part in the binding of IgE to its high affinity receptor (**Fc epsilon** RI) may lead to the design of IgE analogues able to block the **allergic** response. To localize the **Fc epsilon** RI-binding domain of mouse IgE, we attempted to confer on human IgE, which normally does not bind to the rodent receptor, the ability to bind to the rat **Fc epsilon** RI. Employing exon shuffling, we have expressed chimeric epsilon-heavy chain genes composed of a mouse (4-hydroxy-3-nitrophenyl)acetic acid (NP)-binding VH domain, and human C epsilon in which various domains were replaced by their murine counterparts. This has enabled us to test the **Fc epsilon** RI-binding of each mouse IgE domain while maintaining the overall conformation of the molecule. All of the chimeric IgE molecules which contain the murine C epsilon 3, bound equally to both the rodent and human receptor, as well as to **monoclonal antibodies** recognizing a site on IgE which is identical or very close to the **Fc epsilon** RI binding site. Deletion of the second constant region domain did not impair either the binding capacity of the mutated IgE or its ability to mediate **mast cell** degradation. These results assign the third epsilon domain of IgE as the principal region involved in the interaction with the **Fc epsilon** RI.

L13 ANSWER 56 OF 76 MEDLINE DUPLICATE 28
ACCESSION NUMBER: 92040302 MEDLINE
DOCUMENT NUMBER: 92040302
TITLE: New concepts of IgE regulation.
AUTHOR: Heusser C H; Bews J; Brinkmann V; Delespesse G; Kilchherr E; Ledermann F; Le Gros G; Wagner K
CORPORATE SOURCE: Research Allergy-Immunology, Ciba-Geigy Ltd., Basel, Switzerland..
SOURCE: INTERNATIONAL ARCHIVES OF ALLERGY AND APPLIED IMMUNOLOGY, (1991) 94 (1-4) 87-90. Ref: 33
Journal code: GP9. ISSN: 0020-5915.
PUB. COUNTRY: Switzerland
Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)

(REVIEW, ACADEMIC)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199202
AB B cell switch to IgE expression is mediated by IL-4 and is regarded as a T helper cell-related phenomenon. In this overview we describe that IgE switch can also be induced by **mast cell /basophil** like cells (from splenic non-B, non-T cells), activated by **IgE receptor** cross-linking and/or IL-3 which results in IL-4 production by these cells. Furthermore, activated **mast cells** produce their own growth factors, IL-3 and GM-CSF. Thus, activation of **mast cells** can provoke an ongoing local **allergic** reaction as long as antigen confrontation is maintained, a process which is sustained by further IgE production as well as renewal of **mast cells**. It is furthermore demonstrated that in certain established immune situations the IgE response may become independent of IL-4, namely in the spontaneous in vitro IgE expression of cells from atopic individuals as well as in an in vitro antigen-induced secondary IgE response of spleen cells derived from previously immunized mice. Thus, IgE-switched B cells may persist in vivo and may represent a pool of potentially IgE-producing cells. Finally, a selective **inhibition** of the IgE response is described in vitro and in vivo by the use of so-called non-anaphylactic **monoclonal** anti-IgE **antibodies**. Such **antibodies** bind to surface IgE+ B cells, but not to IgE-sensitized **mast cells**, and thereby **inhibit** IgE responses. Non-anaphylactic **antibodies** blocked the binding of **allergen** -specific IgE to **mast cells** by **competing** with the **Fc epsilon** on these cells. As a consequence they do not induce but rather prevent **allergen** -induced mediator release by **mast cells** .(ABSTRACT TRUNCATED AT 250 WORDS)

L13 ANSWER 57 OF 76 BIOSIS COPYRIGHT 1999 BIOSIS
ACCESSION NUMBER: 1990:513097 BIOSIS
DOCUMENT NUMBER: BA90:130373
TITLE: IGG ANTI-IGE AND LYMPHOKINES IN **ALLERGIC** DISEASES.
AUTHOR(S): STADLER B M; GANG Q; VASSELLA C; LOIDOLT D; JAROLIM E; VOGEL M; DE WECK A L
CORPORATE SOURCE: INSELSPITAL, CH-3010 BERN, SWITZ.
SOURCE: ALLERGOLOGIE, (1990) 13 (9), 322-324.
CODEN: ALLRDI. ISSN: 0344-5062.
FILE SEGMENT: BA; OLD
LANGUAGE: German
AB Cytokines seem to play an important immunoregulatory role also for the regulation of IgE synthesis. However, these mediators do not explain the gentical predisposition as well as the antigen specificity of the **allergic** reaction. We propose a model which claims that naturally occurring anti-IgE autoantibodies may be responsible for the specific part of the immunoregulation in **allergic** disease. Despite the limited availability of information on anti-IgE autoantibodies and their in vivo role, many of the biological in vitro functions of autoantibodies suggest such a role. Anti-IgE autoantibodies are either anaphylactogenic or may **inhibit** the binding of IgE to **basophils** or **mast cells**, depending on their epitope specificity. Similarly we found that anti-IgE autoantibodies may bind more IgE to the low **IgE receptor**, or in contrast remove it from the cell surface. Anti-IgE autoantibodies form immune complexes in vivo and prevent therapy the precise determination of IgE. Preliminary clinical studies have also shown that auto-anti-IgE **antibodies** may play a pathophysiological role. We found high levels of anti-IgE autoantibodies in patients non-successfully treated by hyposensitization, while low anti-IgE levels correlated with a successful hyposensitization. Furthermore, high levels of anti-IgE autoantibodies were associated with stronger and more frequent late phase reactions.

L13 ANSWER 58 OF 76 MEDLINE DUPLICATE 29
ACCESSION NUMBER: 90278152 MEDLINE
DOCUMENT NUMBER: 90278152
TITLE: Fc receptors for IgE and interleukin-4 induced IgE and IgG4 secretion.
AUTHOR: Spiegelberg H L
CORPORATE SOURCE: Department of Immunology, Research Institute of Scripps Clinic, La Jolla, California..
CONTRACT NUMBER: AI-10734 (NIAID)
AI-10386 (NIAID)
RRO-5514
+
SOURCE: JOURNAL OF INVESTIGATIVE DERMATOLOGY, (1990 Jun) 94
(6 Suppl) 49S-52S. Ref: 42
Journal code: IHZ. ISSN: 0022-202X.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LANGUAGE: English
FILE SEGMENT: Priority Journals; Cancer Journals
ENTRY MONTH: 199009
AB IgE binds to two types of Fc receptors, called **Fc epsilon** R1 (or high-affinity **Fc epsilon** R) and **Fc epsilon** R2 (or low-affinity **Fc epsilon** R). The **Fc epsilon** R1 is composed of four polypeptide chains, one alpha, one beta, and two gamma chains. The alpha chain contains the IgE binding site and is a member of the immunoglobulin supergene family. The **Fc epsilon** R2, also called CD23, consists of one polypeptide chain which shows homology to animal lectin receptors. **Fc epsilon** R1 are expressed on **mast cells** and **basophils**. Crosslinking of the **Fc epsilon** R1 induces immediate release of mediators of inflammation such as histamine and leukotrienes and delayed secretion of interleukins 4, 5, and 6. **Fc epsilon** R2 are expressed on resting mu delta + B cells, monocytes/macrophages (M phi), eosinophils, and platelets but rarely on T cells. Interleukin-4 upregulates **Fc epsilon** R2 expression on B cells and M phi. The functions of Fc **epsilon** R2 on the different cell types are not fully established and are controversial. **Fc epsilon** R2 on M phi, eosinophils, and platelets mediate cytotoxicity to schistosomules, enhance phagocytosis, and induce the release of granule enzymes. However, M phi from patients with atopic dermatitis expressing significantly more **Fc epsilon** R2 than M phi from normals do not release more leukotriene C4, prostaglandin E2, or beta-glucuronidase after incubation with aggregated IgE than normal monocytes. Furthermore, aggregated IgG1 is much more efficient than IgE in inducing mediator release from M phi and IgG1 **antibodies** are not known to induce immediate-type hypersensitivity reactions. Therefore, definitive proof that **Fc epsilon** R2 are involved in the pathogenesis of **allergic** disorders is still lacking. IL-4 appears to play a central role in immediate-type hypersensitivity. It induces human B cells to secrete IgE and IgG4, Ig isotypes typical for **antibodies** to helminthic parasites and **allergens**. IL-4 stimulates **mast cell** growth and upregulates **Fc epsilon** R2 expression. Interferon-gamma and IL-2 **inhibit** the IL-4-induced IgG4 and IgE secretion. Whether the abnormally high **IgE antibody** production in atopic patients is the result of overproduction of IL-4 or deficient IFN-gamma/IL-2 production is presently unknown.

L13 ANSWER 59 OF 76 MEDLINE DUPLICATE 30
ACCESSION NUMBER: 90083288 MEDLINE
DOCUMENT NUMBER: 90083288
TITLE: Blocking of passive sensitization of human **mast cells** and **basophil** granulocytes with IgE **antibodies** by a recombinant human epsilon-chain fragment of 76 amino acids.
AUTHOR: Helm B; Kebo D; Vercelli D; Glovsky M M; Gould H; Ishizaka K; Geha R; Ishizaka T
CORPORATE SOURCE: Division of Molecular Biology and Biotechnology/Biochemistry, Sheffield University, England.
CONTRACT NUMBER: AI-10060 (NIAID)
AI-22058 (NIAID)
SOURCE: PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA, (1989 Dec) 86 (23) 9465-9.
Journal code: PV3. ISSN: 0027-8424.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals; Cancer Journals
ENTRY MONTH: 199003
AB The recombinant peptide corresponding to residues 301-376 at the junction of constant regions 2 and 3 of the human IgE epsilon chain blocked the in vivo passive sensitization of human skin **mast cells** and in vitro sensitization of human **basophil** granulocytes with human IgE **antibodies**. An injection of the recombinant peptide or E myeloma protein into normal skin sites 1 hr before sensitization with an **allergic** serum blocked passive sensitization. In this system, approximately 10-fold higher molar concentration of the recombinant peptide than E myeloma protein was required for 50% **inhibition** of Prausnitz-Kustner reactions. When the mononuclear cells of two normal individuals were preincubated with the recombinant peptide or E myeloma protein for 15 min before passive sensitization with the same **allergic** serum and the cells were challenged with an optimal concentration of an antigen, approximately 11- to 13-fold higher concentration of the recombinant peptide than E myeloma protein was required for 50% **inhibition** of antigen-induced histamine release. Further studies with several recombinant peptides indicated that amino acid resides 363-376 in the Fc **epsilon**-chain fragment are not essential for binding of the peptide to **Fc epsilon**-chain receptor I.

L13 ANSWER 60 OF 76 MEDLINE DUPLICATE 31
ACCESSION NUMBER: 89309818 MEDLINE
DOCUMENT NUMBER: 89309818
TITLE: Regulation of human **basophil** mediator release by cytokines. I. Interaction with antiinflammatory steroids.
AUTHOR: Schleimer R P; Derse C P; Friedman B; Gillis S; Plaut M; Lichtenstein L M; MacGlashan D W Jr
CORPORATE SOURCE: Johns Hopkins University School of Medicine, Department of Medicine, Baltimore, MD 21239.
CONTRACT NUMBER: AI 20136 (NIAID)
AR 31891 (NIAMS)
AI 20256 (NIAID)
+
SOURCE: JOURNAL OF IMMUNOLOGY, (1989 Aug 15) 143 (4) 1310-7.
Journal code: IFB. ISSN: 0022-1767.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals; Cancer Journals
ENTRY MONTH: 198910
AB We have analyzed the effects of overnight culture of human **basophils** with a variety of cytokines in the presence or absence of the glucocorticoid dexamethasone. The 24-h culture of **basophils** with a range of concentrations of several cytokines (granulocyte-macrophage-CSF, TNF-alpha, IL-1, IL-2, and IL-4) had no effect either on anti-IgE-induced histamine release or the **inhibitory** effects of dexamethasone on histamine release. IFN-gamma enhanced postculture releasability of human **basophils**. The concentration range for this effect was from 50 to 50,000 U/ml and maximal enhancement of anti-IgE-induced **basophil** histamine release was approximately 200% of control. IFN-gamma did not increase the number of occupied or unoccupied **Fc epsilon** RI on human **basophils**, suggesting that the enhancement of histamine release is a result of an intrinsic increase in the releasability

mechanism. rIL-3 also augmented **basophil** releasability (approximately 250% of control) by a mechanism independent of alterations in **basophil** cell surface IgE density. The increase in post culture releasability occurred in both partially purified **basophils** (12 to 90% purity) and mixed leukocytes (approximately 1% **basophils**) although it was more marked in the former. Enhanced postculture releasability after exposure to IL-3 occurred for both IgE-dependent (anti-IgE) and peptide-mediated (fmet-leu-phe) responses and included elevations in the release of both histamine and sulfidopeptide leukotriene, suggesting a global increase in releasability. **Basophils** cultured in the presence of IL-3 were insensitive to the **inhibitory** effects of dexamethasone; at 1,000 U/ml IL-3, dexamethasone **inhibition of basophil** mediator release was completely blocked. None of the other cytokines tested, with the exception of crude or partially purified IL-2 preparations, had this effect. IL-3 contamination may explain the ability of these partially purified "IL-2" preparations to block the **inhibitory** effects of dexamethasone, because this effect was abolished by a specific anti-IL-3 **antibody**. These results suggest that IFN-gamma and IL-3 may modulate the response of human **basophils** in **allergic** reactions. Furthermore, increased local production of IL-3 may "prime" **basophils** for increased releasability and override **inhibitory** effects of elevated systemic glucocorticoids on human **basophils**. Finally, we conclude that the effects of glucocorticoids on human **basophils** may be in part mediated indirectly by effects on cells which produce cytokines, such as IFN-gamma and IL-3, that can modulate **basophil** function.

L13 ANSWER 61 OF 76 MEDLINE DUPLICATE 32
ACCESSION NUMBER: 90087460 MEDLINE
DOCUMENT NUMBER: 90087460
TITLE: **Allergic** etiology and immunology of asthma.
AUTHOR: Moss R B
CORPORATE SOURCE: Department of Pediatrics, Stanford University Medical School, California.,
SOURCE: ANNALS OF ALLERGY, (1989 Dec) 63 (6 Pt 2) 566-77.
Ref: 106
Journal code: 4XC. ISSN: 0003-4738.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199003
AB Although asthma is a complex and multifactorial disease, a relationship between atopic **allergic** sensitization to common aeroallergens and asthma has been recognized for decades. This recognition has not led to a widespread immunologic orientation to asthma diagnosis and treatment. This review summarizes older epidemiologic evidence using historical data and skin tests that associate IgE-mediated events with asthma, and presents more recent studies utilizing in vitro testing to study new subject groups, to demonstrate that in certain situations up to 75% to 100% of the cases of chronic asthma, as well as many acute episodes, have an **allergic** etiology. Thus the old distinctions between intrinsic and extrinsic asthma should be discarded in favor of an aggressive search for **allergic** factors in virtually any patient with asthma. A theoretic basis for the **allergic** etiology of asthma has arisen from recent studies linking (1) IgE **antibody** production with cytophilic sensitization of **mast cells** and possibly other proinflammatory cell types bearing **IgE receptors**; (2) IgE-dependent, **allergen**-induced immediate bronchial reactions with late-phase reactions; and (3) occurrence of late-phase reactions with persistent local inflammation and increased nonspecific bronchial hyperreactivity. Understanding of the **allergic** etiology of asthma in turn gives rise to renewed emphasis upon immunomodulatory approaches to treatment. At present these include **allergen** avoidance measures that reduce natural exposure and conventional high-dose **allergen** injection immunotherapy, both of which have well-documented efficacy when properly applied. In the future, better understanding of the cellular and molecular basis of asthma, in particular the events of the late-phase reaction, are likely to lead to new approaches to treatment based upon rational modulation of these events, possibly with recombinant cytokine-based therapy or synthetic peptide antagonists of defined mediator molecules.

L13 ANSWER 62 OF 76 BIOSIS COPYRIGHT 1999 BIOSIS DUPLICATE 33
ACCESSION NUMBER: 1988:268701 BIOSIS
DOCUMENT NUMBER: BA86:7945
TITLE: **INHIBITION** OF **ALLERGIC** REACTIONS WITH **MONOCLONAL ANTIBODY** TO THE HIGH AFFINITY **IGE RECEPTOR**.
AUTHOR(S): KITANI S; KRAFT D; FISCHLER C; MERGENHAGEN S E; SIRAGANIAN R P
CORPORATE SOURCE: CLINICAL IMMUNOL. SECT., LAB. MICROBIOL. AND
IMMUNOL., NIDR, NIH, BETHESDA, MD. 20892.
SOURCE: J IMMUNOL, (1988) 140 (8), 2585-2588.
CODEN: JOIMA3. ISSN: 0022-1767.
FILE SEGMENT: BA; OLD
LANGUAGE: English
AB A mAb that reacts with the high affinity IgE-R on the rat basophilic leukemia cells (**RBL-2H3**) was used to **inhibit** **allergic** reactions. In vitro, the intact mAb BA3 and its Fab fragment **inhibited** radiolabeled IgE binding to the RBL-2H3 cells. The mAb binds to the IgE-R with a higher affinity than does IgE. Whereas the intact mAb released histamine from the RBL-2H3 cells, the Fab was inactive. The addition of the Fab fragments to RBL-2H3 **inhibited** the IgE-mediated histamine release reaction. The Fab fragments also **inhibited** in vivo passive cutaneous reactions in rats when injected intradermally either before or after IgE. The injection of the mAb Fab i.v. before the injection of the IgE into the skin sites also **inhibited** reactions, although it was less effective. The results demonstrate that anti-R **antibodies** can be used as a model for **inhibiting** immediate hypersensitivity reactions.

L13 ANSWER 63 OF 76 MEDLINE DUPLICATE 34
ACCESSION NUMBER: 89016229 MEDLINE
DOCUMENT NUMBER: 89016229
TITLE: IgE response and its regulation in **allergic** diseases.
AUTHOR: Lee B W; Geha R S; Leung D Y
CORPORATE SOURCE: Children's Hospital, Boston, Massachusetts.
CONTRACT NUMBER: AI-22058 (NIAID)
AI-20373 (NIAID)
HL-37260 (NHLBI)
SOURCE: PEDIATRIC CLINICS OF NORTH AMERICA, (1988 Oct) 35 (5) 953-67. Ref: 81
Journal code: OUM. ISSN: 0031-3955.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, ACADEMIC)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals
ENTRY MONTH: 198901
AB The distinguishing feature of the **allergic** person is his or her elevation of serum IgE. This propensity to develop a sustained IgE response is determined genetically. The biologic effects of IgE are mediated via Fc receptors (**Fc epsilon** R) present on **mast cells** and **basophils** (**Fc epsilon** R type 1) and subpopulations of monocytes, macrophages, eosinophils, and platelets (**Fc epsilon** R type 2). Interaction of **allergen** with IgE on these cells results in receptor "bridging" and the release of histamine and other inflammatory mediators. Fc **epsilon** R type 2 on lymphocytes and monocytes are upregulated in atopic disease and may play a role in the **allergic** inflammatory reaction. The activation of B cells to synthesize IgE requires several stages (see Fig. 2). T cells play an important role in the regulation of IgE synthesis. In vitro activation of resting B cells to synthesize IgE requires direct cellular interaction with T cells or the presence of IL4 for activation. The latter effect is **inhibited** by alpha-interferon. Preactivated B cells are influenced in an isotype-specific manner by T-cell-derived IgE binding factors (IgE-BF), which may act as IgE-potentiating or IgE-suppressive factors, depending on their degree of glycosylation. The regulation of IgE synthesis is an important area of investigation. It provides us with an understanding of the basis of the human **allergic** response and ultimately may provide the basis for novel strategies in the treatment of **allergic** diseases.

L13 ANSWER 64 OF 76 BIOSIS COPYRIGHT 1999 BIOSIS
ACCESSION NUMBER: 1987:291693 BIOSIS
DOCUMENT NUMBER: BA84:21725
TITLE: **MONOCLONAL ANTIBODIES** SPECIFIC TO THE ALPHA-SUBUNIT OF THE **MAST CELL** 'S **FC-EPSILON**-R-BLOCK IGE BINDING AND TRIGGER HISTAMINE RELEASE.
AUTHOR(S): BANIYASH M; ALKALAY I; ESHHAR Z
CORPORATE SOURCE: DEP. CHEMICAL IMMUNOLOGY, WEIZMANN INST. SCI.,
REHOVOT 76100, ISRAEL.
SOURCE: J IMMUNOL, (1987) 138 (9), 2999-3004.
CODEN: JOIMA3. ISSN: 0022-1767.
FILE SEGMENT: BA; OLD
LANGUAGE: English
AB In an attempt to block the interactions between IgE and its receptor on **mast cells** (**Fc.epsilon** .R), we have established anti-**Fc.epsilon**.R **monoclonal antibodies** (mAb) by fusion of myeloma cells with mouse splenocytes immunized with irradiated rat basophilic leukemia (RBL) cells. Two anti-**Fc.epsilon**.R mAb were obtained (denoted 4.7 and 5.14) that could specifically bind to RBL and **mast cells**. This binding could be **inhibited** by IgE. The mAb and their F(ab')2 fragments **inhibited** 125I-IgE binding to RBL cell and triggered cell degranulation. The Fab' fragments, on the other hand, could only **inhibit** IgE binding but did not stimulate cell degranulation. Furthermore, these monovalent fragments **inhibited** RBL and **mast cell** degranulation induced by IgE-antigen complexes both in vitro and in vivo in the passive cutaneous anaphylaxis reaction. The number of mAb 4.7 and 5.14 molecules bound per RBL cells was similar to that of IgE; nevertheless, mAb 4.7 and 5.14 recognized different epitopes on the **IgE receptor**. Immunoprecipitation and immunoblotting analysis demonstrated that the mAb reacted with the .alpha.-subunit of the **Fc.epsilon**.R. Our findings establish the anti-**Fc.epsilon**.R mAb as a useful reagent for the isolation and characterization of the **Fc.epsilon**.R's .alpha.-subunit and the monomeric (Fab') for blocking the IgE-**Fc.epsilon**.R interactions.

L13 ANSWER 65 OF 76 BIOSIS COPYRIGHT 1999 BIOSIS
ACCESSION NUMBER: 1988:4906 BIOSIS
DOCUMENT NUMBER: BA85:4906
TITLE: ANTI-ANTI-IGE IDIOTYPIC **ANTIBODIES** MIMIC IGE IN THEIR BINDING TO THE **FC-EPSILON** RECEPTOR.
AUTHOR(S): BANIYASH M; ESHHAR Z
CORPORATE SOURCE: WEIZMANN INST. SCI., DEP. CHEM. IMMUNOL., REHOVOT,
76100, ISRAEL.
SOURCE: EUR J IMMUNOL, (1987) 17 (9), 1337-1342.
CODEN: EJIMAF. ISSN: 0014-2980.
FILE SEGMENT: BA; OLD
LANGUAGE: English
AB The binding site of some anti-idiotypic **antibodies** (anti-Id) can appear as a structural image of the antigen and as such may mimic its biologic activity. We raised anti-anti-IgE **antibodies** in an attempt to obtain anti-Id capable of interacting with the FcE receptor (FcER). Guinea pigs were immunized with purified murine **monoclonal antibodies** (mAb) that had been found to react with epitopes closely related to the

site on the IgE molecule which is recognized by the FcER. After only two injections, we could detect in the immune sera anti-Id that inhibited the binding of IgE to the anti-IgE mAb used as immunogens. However, only after 10 immunizations over a period of about 6 months could we detect antibodies that competed efficiently with the binding of IgE to rat basophilic leukemia (RBL) cells. The "IgE-like" anti-Id could be affinity purified from immunosorbents made of the anti-IgE mAb. F(ab')2 and Fab' fragments were as effective inhibitors of IgE binding as the intact anti-anti-Id antibodies. Some of the anti-Id caused RBL degranulation and all of them, like IgE, inhibited the binding of specific anti-FcER mAb to RBL cells. In summary, by hyperimmunization with anti-IgE mAb we could obtain anti-Id whose antigen-binding site is recognized by the mast cell receptor specific to the Fc portion of IgE.

L13 ANSWER 66 OF 76 BIOSIS COPYRIGHT 1999 BIOSIS
ACCESSION NUMBER: 1987:396878 BIOSIS
DOCUMENT NUMBER: BA84:73058
TITLE: STUDIES OF IGE-DEPENDENT HISTAMINE RELEASING FACTORS
HETEROGENEITY OF IGE.
AUTHOR(S): MACDONALD S M; LICHTENSTEIN L M; PROUD D; PLAUT M;
NACLERIO R M; MACGLASHAN D W; KAGEY-SOBOTKA A
CORPORATE SOURCE: DIV. CLINICAL IMMUNOL., JOHNS HOPKINS UNIV. SCH.
MED., GOOD SAMARITAN HOSP., 5601 LOCH RAVEN BLVD., BALTIMORE, MD. 21239.
SOURCE: J IMMUNOL, (1987) 139 (2), 506-512.
CODEN: JOIMA3. ISSN: 0022-1767.
FILE SEGMENT: BA; OLD
LANGUAGE: English
AB Nasal lavage fluids from unstimulated individuals contain a histamine-releasing factor (HRF) similar to those which we have previously described from macrophages, platelets, and from blister fluids obtained during the late cutaneous reaction. The nasal HRF was partially purified by ion-exchange chromatography and gel filtration. Although some m.w. heterogeneity was observed, the majority of the HRF eluted at an apparent m.w. range of 15,000 to 30,000. This partially purified HRF induced histamine release from basophils of certain individuals. Histamine release occurred via a mechanism which is IgE-dependent in that: 1) basophils desensitized by exposure to anti-IgE in the absence of calcium no longer respond to HRF, and desensitization with HRF reduces responsiveness to anti-IgE; and 2) removal of IgE from the basophil surface by using lactic acid renders cells unresponsive to HRF. We have further defined this IgE dependence and have shown that the reason that only selected basophil donors respond to HRF is due to a previously unrecognized, functional heterogeneity of IgE. Thus, passive sensitization using sera from responders restored the responsiveness of acid-stripped basophils and conferred responsiveness to basophils of a nonresponder with naturally unoccupied IgE receptors. Sera from nonresponders failed to do this even though similar numbers of IgE molecules were put onto the basophil surface in each case. This property of responder sera was due to IgE because both heating sera at 56.degree. C for 2 hr and passage of sera over anti-IgE-Sepharose (which removes > 90% of the IgE) markedly reduced the ability of sera to induce responsiveness, and because an excess of either purified IgE myeloma or purified penicillin-specific IgE antibody from a nonresponder competitively inhibited the ability of IgE from responder sera to induce responsiveness to HRF. We conclude that nasal lavage fluids contain an HRF which induces basophil histamine release in a specific, IgE-dependent fashion but only from individuals with the appropriate type of IgE. Because we have shown that basophils are recruited into the nose during the late-phase reaction, we suggest that nasal HRF may induce these cells to release histamine and other mediators which could contribute to the symptomatology of the late-phase reaction.

L13 ANSWER 67 OF 76 MEDLINE
ACCESSION NUMBER: 86158975 MEDLINE
DOCUMENT NUMBER: 86158975
TITLE: The role of immunoglobulin E receptors in allergic diseases.
AUTHOR: Konig W; Pfeiffer P; Rauschen I; Knoller J; Schonfeld W; Theobald K
SOURCE: ARZNEIMITTEL-FORSCHUNG, (1985) 35 (12A) 1953-7. Ref: 47
Journal code: 91U. ISSN: 0004-4172.
PUB. COUNTRY: GERMANY, WEST: Germany, Federal Republic of
Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198606
AB Recent studies presented evidence that subpopulations of lymphocytes, monocytes and eosinophils carry immunoglobulin (IgE)-specific membrane receptors which differ from the classical Fc epsilon-receptors on basophil granulocytes and mast cells. The analysis of IgE-receptor interactions with various cells has led to important insights as to the requirements of IgE-antibody regulations. In addition, the membrane biochemical mechanisms in the induction of mediator release became better understood. The expression of low affinity receptors on lymphocytes appears to by intimately involved in the generation of IgE enhancing and suppressive factors. In future, these molecules might be available for immunotherapy. A summary of the recent knowledge combined with our data is presented.

L13 ANSWER 68 OF 76 MEDLINE DUPLICATE 35
ACCESSION NUMBER: 85240533 MEDLINE
DOCUMENT NUMBER: 85240533
TITLE: Inhibition of the Prausnitz-Kustner reaction by an immunoglobulin epsilon-chain fragment synthesized in E. coli.
AUTHOR: Geha R S; Helm B; Gould H
CONTRACT NUMBER: AM31925 (NIADDK)
AI20373 (NIAID)
AI-10060 (NIAID)
SOURCE: NATURE, (1985 Jun 13-19) 315 (6020) 577-8.
Journal code: NSC. ISSN: 0028-0836.
PUB. COUNTRY: ENGLAND: United Kingdom
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals; Cancer Journals
ENTRY MONTH: 198510
AB The Prausnitz-Kustner (P-K) reaction is a sensitive test for the presence and activity in the skin of immunoglobulin E, an important class of immunoglobulin mediating allergic reactions. A fragment of the human myeloma ND epsilon-chain gene, encoding the second, third and fourth domains of the IgE constant region (C epsilon 2-4) was assessed here for its ability to inhibit the P-K reaction in vivo. Injection of the fragment in skin sites of healthy human adults prevented subsequent sensitization with serum containing IgE antibody to ragweed antigen. Inhibition of the P-K reaction required a 200-fold molar excess of the C epsilon fragment over the IgE present in the sensitizing serum. The efficacy of the C epsilon fragment in inhibiting the P-K reaction compared favourably with that of natural myeloma IgE (PS) in terms of both blocking concentrations and duration of the blocking effect. The inhibition of the P-K reaction by C epsilon 2-4 fragments was specific and probably caused by the saturation of IgE receptors on mast cells by the recombinant gene product.

L13 ANSWER 69 OF 76 EMBASE COPYRIGHT 1999 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 85021017 EMBASE
TITLE: The cromolyn binding protein constitutes the Ca2+ channel of basophils opening upon immunological stimulus.
AUTHOR: Mazurek N.; Schindler H.; Schurholz Th.; Pecht I.
CORPORATE SOURCE: Department of Chemical Immunology, The Weizmann
Institute of Science, Rehovot 76100, Israel
SOURCE: PROC. NATL ACAD. SCI. U. S. A., (1984) 81/21I (6841-6845).
CODEN: PNASA6
COUNTRY: United States
LANGUAGE: English
AB Ca2+ channel opening has been proposed to be induced in the plasma membrane of mast cells and basophils upon crosslinking their Fc(.epsilon.) receptors. Here we report direct conductance measurements on planar lipid bilayers containing membrane components of rat basophils (RBL-2H3 line). These studies identify the Ca2+ channel-forming membrane component as the cromolyn binding protein [CBP, in which cromolyn is the anti-asthmatic drug 1,3-bis(2-carboxychromon-5-yloxy)-2-hydroxypropane]. Planar membranes were first formed from lipid vesicles containing unfractionated plasma membrane components prepared from RBL-2H3 cells. Conductance of these bilayers was induced by crosslinking IgE bound to the Fc(. epsilon.) receptors of this membrane by a specific polyvalent antigen. Channel conductance in the presence of only Ca2+ ions (2 mM) was 2 pS. When only sodium ions were present (150 mM), conductance was 10 pS. Upon addition of Ca2+ (2 mM) to the Na+ ion-containing solution, the conductance decreased from 10 pS to that of the Ca2+ ions - namely, 2 pS. Open channel times were in the range of several hundred milliseconds. Conductance amplitudes and time characteristics were independent of the applied voltage. As our earlier studies revealed the essential role of the CBP in Ca2+ conductance of basophil membranes, we formed planar bilayers containing this isolated protein alone. Crosslinking of the CBP by a monoclonal antibody specific to it resulted in the appearance of channel conductances. All characteristics of these channels exhibited great similarity to those observed in planar membranes containing unfractionated RBL-2H3 membrane components. Moreover, in the latter membranes, the monoclonal anti-CBP antibody induced channel conductances that display an even closer similarity to those observed in membranes containing CBP alone. Conductances of both types of planar membranes, irrespective of the mode of activation used, were inhibited by cromolyn. Furthermore, the conductance induced in RBL membranes by polyvalent antigen was inhibited on dissociation of the crosslinked aggregates by a monovalent hapten. The detailed resemblance in channel behavior observed in experiments with the two types of planar bilayers provides compelling evidence that the CBP is the essential and sufficient component forming Ca2+ channels in basophil plasma membranes.

L13 ANSWER 70 OF 76 BIOSIS COPYRIGHT 1999 BIOSIS DUPLICATE 36
ACCESSION NUMBER: 1984:277242 BIOSIS
DOCUMENT NUMBER: BA78:13722
TITLE: RESTORATION OF CALCIUM INFLUX AND DE GRANULATION CAPACITY OF VARIANT RBL-2H-3 CELLS UPON IMPLANTATION OF ISOLATED CROMOLYN BINDING PROTEIN.
AUTHOR(S): MSZUREK N; BASHKIN P; LOYTER A; PECHT I
CORPORATE SOURCE: DEP. CHEM. IMMUNOL., WEIZMANN INST. SCI., REHOVOT
76100, ISR.
SOURCE: PROC NATL ACAD SCI U S A, (1983) 80 (19), 6014-6018.
CODEN: PNASA6. ISSN: 0027-8424.
FILE SEGMENT: BA; OLD
LANGUAGE: English
AB Variants of the rat basophilic leukemia cells (RBL-2H3), deficient in their binding capacity for the antiallergic drug cromolyn but displaying unimpaired ability to bind IgE, were selected and cloned. Although the histamine content and the number of IgE receptors in these variants are similar to those of the parental cells, they cannot be stimulated immunologically to allow Ca2+ influx and to degranulate. The Ca2+ ionophore A23187 [calcimycin] causes these variants to degranulate, indicating that the mechanism distal to the Ca2+ gating is intact in the variants. The cromolyn binding protein (CBP), present in the membranes of RBL-2H3 cells was isolated by affinity chromatography under

non-denaturing conditions. In the current study Sendai-virus envelopes were used as fusogenic carriers to implant the purified CBP into the membrane of variant **basophils** that were defective in it. This fusion leads to the restoration of Ca2+ uptake and degranulation capacity of the variants after IgE-mediated stimulation. These restored activities seem to show a sigmoidal dependence on the amount of incorporated CBP. Saturation values comparable to those of the parental line are reached when the level of implanted CBP approaches its density on the latter line. The restored capacity is due to the implanted CBP, because the reinstated immunological response can be blocked by the **inhibitory** drug cromolyn and by **monoclonal antibodies** specific to CBP, both shown to prevent Ca2+ uptake and degranulation in **mast cells** and parental RBL-2H3 cells. Thus, CBP plays an important role in the Ca2+ gating process resulting in degranulation.

L13 ANSWER 71 OF 76 MEDLINE DUPLICATE 37
ACCESSION NUMBER: 83109938 MEDLINE
DOCUMENT NUMBER: 83109938
TITLE: Does hyperimmunoglobulinemia-E protect tropical populations from **allergic** disease?.
AUTHOR: Larrick J W; Buckley C E 3d; Machamer C E; Schlagel G D; Yost J A; Blessing-Moore J; Levy D
SOURCE: JOURNAL OF ALLERGY AND CLINICAL IMMUNOLOGY, (1983 Feb) 71 (2) 184-8.
Journal code: H53. ISSN: 0091-6749.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals
ENTRY MONTH: 198305
AB The Waorani Indians of eastern Ecuador have the highest blood concentration of IgE reported in a human population. Evidence obtained by medical history, physical examination, and immediate hypersensitivity skin tests suggests that pollen **allergy** and other atopic diseases are rare among the Waorani. A similar association between parasite-induced hyperimmunoglobulinemia-E and a low prevalence of conventional atopic disease has been reported in numerous other tropical populations. Saturation of **mast cell IgE receptors** with **antibodies** directed to the parasite and/or other antigens and **competitive inhibition** of passive binding of pollen **allergen**-specific IgE is one hypothetical cause of this association. We have tested this interesting conjecture by passively sensitizing the skin of Waorani Indians with serum containing pollen **allergen**-specific IgE **antibodies**. Waorani Indians with hyperimmunoglobulinemia-E can be adoptively sensitized with human ragweed or rye grass hyperimmune IgE antisera. This suggests that the cutaneous **mast cells** of healthy Waorani have active **IgE receptors**. The high circulating plasma concentrations of IgE in the Waorani do not prevent adoptive cutaneous sensitization with pollen-specific IgE **antibodies**.

L13 ANSWER 72 OF 76 MEDLINE DUPLICATE 38
ACCESSION NUMBER: 83081630 MEDLINE
DOCUMENT NUMBER: 83081630
TITLE: The mechanism of passive sensitization: occupation of free **IgE receptors** or exchange with cell-bound IgE.
AUTHOR: Van Toorenenbergen A W; Aalberse R C; Reerink-Brongers E E
SOURCE: INTERNATIONAL ARCHIVES OF ALLERGY AND APPLIED IMMUNOLOGY, (1983) 70 (1) 71-7.
Journal code: GP9. ISSN: 0020-5915.
PUB. COUNTRY: Switzerland
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198304
AB Leukocytes were passively sensitized, as judged by **allergen**-induced histamine release. Before and after passive sensitization, the amount of total IgE on **basophil** leukocytes was measured by quantitative immunofluorescence microscopy. No measurable increase in IgE load was observed. When leukocytes were incubated with acid buffer after passive sensitization, no **allergen**-specific IgE was found in acid eluates of these leukocytes. Preincubation of leukocytes with excess irrelevant IgE resulted in **inhibition** of a subsequent passive sensitization. Postincubation of in vivo- or in vitro-sensitized leukocytes with excess irrelevant IgE had no effect on the sensitivity of these cells towards **allergen**. When leukocytes were incubated with TNP-labeled myeloma IgE and subsequently with fluorescein-labeled anti-TNP **antibodies**, no fluorescence was observed on **basophil** leukocytes, although binding of TNP-labeled IgE was demonstrated by anti-TNP antiserum-induced histamine release. It is concluded that only small amounts of IgE become bound to **basophil** leukocytes during passive sensitization, compared with the amounts of IgE already present on these cells. Exchange of IgE between cells and sensitizing serum does not take place to a measurable extent during passive sensitization.

L13 ANSWER 73 OF 76 CANCERLIT DUPLICATE 39
ACCESSION NUMBER: 82626996 CANCERLIT
DOCUMENT NUMBER: 82626996
TITLE: CHARACTERIZATION OF FC RECEPTORS FOR IGE ON HUMAN ALVEOLAR MACROPHAGES.
AUTHOR: Melewicz F M; Kline L E; Cohen A B; Spiegelberg H L
CORPORATE SOURCE: (c/o Spiegelberg), Scripps Clinic and Res. Foundation, 10666 N. Torrey Pines Road, La Jolla, CA, 92037.
SOURCE: Clin Exp Immunol, (1982). Vol. 49, No. 2, pp. 364-370.
ISSN: 0009-9104.
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
FILE SEGMENT: ICDB
LANGUAGE: English
ENTRY MONTH: 198210
AB Human alveolar macrophages (aMphi) isolated from lung lavages performed during bronchoscopy and after surgical removal of pulmonary lobes were analyzed for Fc receptors for IgE (**Fc epsilon** R) and IgG (Fc gamma R) by rosette assays. A mean +-1 s.d. of 8.0 +-2.6% of aMphi formed rosettes with fixed ox erythrocytes coated with an IgE myeloma protein (Eo'-IgE). The Eo'-IgE rosettes were **inhibited** by two IgE myeloma proteins and by IgE Fc fragments but not by myeloma proteins of the other Ig classes or by IgE denatured by heating or **reduction** and alkylation. Fresh ox erythrocytes sensitized with rabbit IgG **antibodies** (EoA) formed rosettes with 64.1 +-20.3% of the aMphi. Peripheral blood monocytes formed 10.6 +-1.2% Eo'-IgE and 90.2 +-1 6.0% EoA rosettes. Incubation of the aMphi with a goat antiserum to human lymphocyte **Fc epsilon** R **inhibited** Eo'-IgE rosette formation on aMphi by 80% but did not affect the percentage of EoA rosettes. The antiserum also **inhibited** Eo'-IgE rosettes formed by peripheral blood monocytes and cultured macrophage-like U937 cells but not those formed by basophilic granulocytes obtained from a patient with chronic myelogenous leukemia. There was no relationship between age, sex, diagnosis or smoking history of the patients and the percentage of aMphi forming Eo'-IgE rosettes. These studies demonstrate that a subpopulation of human aMphi bear **Fc epsilon** R that share antigenic determinants with **Fc epsilon** R on lymphocytes and monocytes. **Fc epsilon** R(+) aMphi may play an important role in **allergic** and inflammatory pulmonary diseases by inducing the release of mediators of inflammation after interaction with IgE immune complexes. (Author abstract) (24 Refs)

L13 ANSWER 74 OF 76 EMBASE COPYRIGHT 1999 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 80185177 EMBASE
TITLE: Stimulation of phospholipid methylation, Ca2+ influx, and histamine release by bridging of IgE **receptors** on rat **mast cells**
AUTHOR: Ishizaka T.; Hirata F.; Ishizaka K.; Axelrod J.
CORPORATE SOURCE: Johns Hopkins Univ. Sch. Med., Good Samaritan Hosp., Baltimore, Md. 21239, United States
SOURCE: PROC. NATL. ACAD. SCI. U. S. A., (1980) 77/4 I (1903-1906).
CODEN: PNASA6
COUNTRY: United States
LANGUAGE: English
AB Normal rat **mast cells** were stimulated by **antibodies** against **IgE receptors** (anti-RBL) or by anti-IgE, and [3H]methyl group incorporation into phospholipids, 45Ca uptake, and histamine release were examined. Anti-RBL or its F(ab')2 fragments and anti-IgE induced an increase in the incorporation of [3H]methyl into phospholipids, in 45Ca influx, and in histamine release. By contrast, Fab' monomer fragments of anti-RBL induced none of these reactions. The transient increase of [3H]methyl incorporation in lipids peaked within 15 sec after the addition of either anti-RBL or anti-IgE and fell to basal level in 30 sec. This was then followed by an influx of 45Ca that increased to a maximum in 2 min and by histamine release that reached a maximum in 3 min. **Inhibition** of phospholipid methylation resulted in an **inhibition** of 45Ca influx and histamine release. These findings demonstrate that phospholipid methylation in rat **mast cells** is induced by bridging **of IgE receptors** on the cell surface and that increased methylation of phospholipids sets the stage for an influx of Ca2+ and subsequent release of histamine.

L13 ANSWER 75 OF 76 MEDLINE DUPLICATE 40
ACCESSION NUMBER: 79171919 MEDLINE
DOCUMENT NUMBER: 79171919
TITLE: Regulation of asthma by intestinal parasites. Investigation of possible mechanisms.
AUTHOR: Turner K J; Quinn E H; Anderson H R
SOURCE: IMMUNOLOGY, (1978 Aug) 35 (2) 281-8.
Journal code: GH7. ISSN: 0019-2805.
PUB. COUNTRY: ENGLAND: United Kingdom
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 197909
AB The serum IgE levels of asthmatic subjects from Papua, New Guniea (PNG) were similar to those of corresponding control subjects but significantly higher than Caucasian asthmatics from Western Australia (AUS). Notwithstanding these differences in total IgE, the levels of IgE **antibodies** to D. pteronyssinus (RAST units) were similar in both asthmatic groups. The mite specific IgE **antibody** levels were independent of those to Ascaris and hookworm, suggesting that antigenic **competition** is not a factor of importance in sensitization to environmental **allergens** in the tropics. This study does not support the proposal that the low prevalence of **allergic** disease in tropical areas where parasitism is endemic is attributed to **mast cell** blockade through saturation of **IgE receptors**.

L13 ANSWER 76 OF 76 MEDLINE
ACCESSION NUMBER: 78243751 MEDLINE
DOCUMENT NUMBER: 78243751
TITLE: The role of **basophils** in inflammatory reactions.
AUTHOR: Lichtenstein L M; Marone G; Thomas L L; Malveaux F J
SOURCE: JOURNAL OF INVESTIGATIVE DERMATOLOGY, (1978 Jul) 71 (1) 65-9. Ref: 47
Journal code: IHZ. ISSN: 0022-202X.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals
ENTRY MONTH: 197812
AB This review demonstrates that **basophils** reflect skin and

lung **mast cell** reactivity and show characteristic changes in mediator release associated with clinical disease. Although the numbers of IgE molecules and **IgE receptors** on **basophils** have been enumerated, these have, in most instances, little influence on the release of histamine after challenge. There is, rather, a parameter of "releasability" that may be a major variable in **allergic** disease states. **Basophils** contain and release histamine, the eosinophil chemotactic factor of anaphylaxis (ECFA), a slow reacting substance of anaphylaxis (SRS-A), and a kallikrein. The release process is controlled by hormone-**basophil** receptor interactions that determine the cyclic AMP level; plasma and tissue adenosine levels appear prominent in this control. Histamine feeds back to negatively modulate **basophil** and **mast cell** release through a specific histamine 2-receptor; it also **inhibits** lymphocyte and neutrophil function. Like neutrophils, **basophils** contain beta-glucuronidase while neutrophils contain SRS-A and a low-molecular-weight ECF. The stimuli for primary **basophil** and neutrophil release are, however, quite different, although phagocytic stimuli, which fail to cause **basophil** mediator release, potentiate the IgE response. It is concluded that basophols play a significant in vivo role in inflammation by acting as an interface between foreign antigens, the serum cascade systems, and other inflammatory cells.

=> file uspatfull

FILE 'USPATFULL' ENTERED AT 17:27:33 ON 03 JAN 1999
CA INDEXING COPYRIGHT (C) 1999 AMERICAN CHEMICAL SOCIETY (ACS)

FILE COVERS 1971 TO PATENT PUBLICATION DATE: 29 Dec 1998 (19981229/PD)
FILE LAST UPDATED: 30 Dec 1998 (19981230/ED)
HIGHEST PATENT NUMBER: US5855020
CA INDEXING IS CURRENT THROUGH 30 Dec 1998 (19981230/UPCA)
ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 29 Dec 1998 (19981229/PD)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: May 1998
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Aug 1998

>>> Page images are available for patents from 1/1/95. Current <<<
>>> week patent text is typically loaded by Thursday morning and <<<
>>> page images are available for display by the end of the day. <<<
>>> Image data for the /FA field are available the following week. <<<

>>> Complete CA file indexing for chemical patents (or equivalents) <<<
>>> is included in file records. A thesaurus is available for the <<<
>>> USPTO Manual of Classifications in the /NCL, /INCL, and /RPCL <<<
>>> fields. This thesaurus includes catchword terms from the <<<
>>> USPTO/MOC subject headings and subheadings. Thesauri are also <<<
>>> available for the WIPO International Patent Classification <<<
>>> (IPC) Manuals, editions 1-6, in the /IC1, /IC2, /IC3, /IC4, <<<
>>> /IC5, and /IC (/IC6) fields, respectively. The thesauri in <<<
>>> the /IC5 and /IC fields include the corresponding catchword <<<
>>> terms from the IPC subject headings and subheadings. <<<

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d his

(FILE 'HOME' ENTERED AT 16:59:36 ON 03 JAN 1999)
SET PLURALS ON

FILE 'MEDLINE, CANCERLIT, BIOSIS, EMBASE, WPIDS' ENTERED AT 17:01:15 ON 03 JAN 1999
L1 2224 S FC.EPSILON.RI
L2 62101 S MAST CELL
L3 6557 S FC.EPSILON. OR IGE(W)RECEPTOR
L4 1244 S L1 AND L2
L5 404 S L4 AND (ANTIBOD? OR MONOCLON? OR CHIMERIC(W)ANTIBOD? O
L6 101 S L5 AND (ALLERG?)
L7 52 DUP REM L6 (49 DUPLICATES REMOVED)
L8 22 S L7 AND (INHIBIT? OR REDUC? OR AMELIORAT? OR COMPET?)
L9 18456 S BASOPHIL
L10 18464 S L8 OR BASOPHIL
L11 8 S L10 NOT L9
L12 145 S (L2 OR BASOPHIL) AND L3 AND (ANTIBOD? OR MONOCLON? OR
L13 76 DUP REM L12 (69 DUPLICATES REMOVED)

FILE 'USPATFULL' ENTERED AT 17:27:33 ON 03 JAN 1999

=> s l6 and (inhib? or reduc? or ameliorat? or compet?)

16278 FC
4493 FCS
20063 FC
(FC OR FCS)
41540 EPSILON
4 EPSILONS
41540 EPSILON
(EPSILON OR EPSILONS)
9688 RI
681 RIS
10293 RI
(RI OR RIS)
27 FC.EPSILON.RI
(FC(W)EPSILON(W)RI)
10380 MAST
1876 MASTS
10896 MAST
(MAST OR MASTS)
220814 CELL
178765 CELLS
263654 CELL
(CELL OR CELLS)
1910 MAST CELL
(MAST(W)CELL)
32647 ANTIBOD?
15542 MONOCLON?
4238 CHIMERIC
24 CHIMERICS
4238 CHIMERIC
(CHIMERIC OR CHIMERICS)
32647 ANTIBOD?
1183 CHIMERIC(W) ANTIBOD?
4238 CHIMERIC
24 CHIMERICS
4238 CHIMERIC
(CHIMERIC OR CHIMERICS)
15542 MONOCLON?
110 CHIMERIC(W) MONOCLON?
14881 ALLERG?
265102 INHIB?
1389860 REDUC?
11341 AMELIORAT?
65071 COMPET?
L14 18 L6 AND (INHIB? OR REDUC? OR AMELIORAT? OR COMPET?)

=> d l14 1-18 ibib ab

L14 ANSWER 1 OF 18 USPATFULL
ACCESSION NUMBER: 1998:159760 USPATFULL
TITLE: Targeted cytolysis of HIV-infected cells by chimeric CD4 receptor-bearing cells
INVENTOR(S): Seed, Brian, Boston, MA, United States
Banapour, Babak, Boston, MA, United States
Romeo, Charles, Belmont, MA, United States
Kolanus, Waldemar, Watertown, MA, United States
PATENT ASSIGNEE(S): The General Hospital Corporation, Boston, MA, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5851828	981222
APPLICATION INFO.:	US 94-284391	940802 (8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 94-195395, filed on 14 Feb 1994, now abandoned which is a continuation-in-part of Ser. No. US 92-847566, filed on 6 Mar 1992, now abandoned which is a continuation-in-part of Ser. No. US 91-665961, filed on 7 Mar 1991, now abandoned
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Budens, Robert D.
LEGAL REPRESENTATIVE: Clark & Elbing LLP
NUMBER OF CLAIMS: 15
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 56 Drawing Figure(s); 27 Drawing Page(s)
LINE COUNT: 3012
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Disclosed is a method of directing a cellular immune response against an HIV-infected cell in a mammal involving administering to the mammal an effective amount of therapeutic cells which express a membrane-bound, proteinaceous chimeric receptor comprising (a) an extracellular portion which includes a fragment of CD4 which is capable of specifically recognizing and binding the HIV-infected cell but which does not mediate HIV infection and (b) an intracellular portion which is capable of signalling the therapeutic cell to destroy the receptor-bound HIV-infected cell. Also disclosed are cells which express the chimeric receptors and DNA and vectors encoding the chimeric receptors.

L14 ANSWER 2 OF 18 USPATFULL
ACCESSION NUMBER: 1998:159720 USPATFULL
TITLE: Product and process to regulate actin polymerization
INVENTOR(S): Johnson, Gary L., Boulder, CO, United States
PATENT ASSIGNEE(S): National Jewish Center For Immunology and Respiratory Medicine, Denver, CO, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5851786	981222
APPLICATION INFO.:	US 95-534694	950927 (8)

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Leary, Louise
LEGAL REPRESENTATIVE: Lahive & Cockfield, LLP; DeConti, Jr., Giulio A.; Kara, Catherine J.
NUMBER OF CLAIMS: 43
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 6 Drawing Figure(s); 6 Drawing Page(s)
LINE COUNT: 1622
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to methods useful for identifying compounds capable of specifically regulating actin polymerization, stress fiber formation or focal adhesion assembly by regulating G.sub..alpha.12 and/or G.sub..alpha.13 activity in cells involved in inflammatory responses, immune responses, **allergic** responses and neuronal responses, kits to perform such assays and methods to control disease related to such responses.

L14 ANSWER 3 OF 18 USPATFULL
ACCESSION NUMBER: 1998:150744 USPATFULL
TITLE: Redirection of cellular immunity by receptor chimeras
INVENTOR(S): Seed, Brian, Boston, MA, United States
Romeo, Charles, Belmont, MA, United States
Kolanus, Waldemar, Watertown, MA, United States
PATENT ASSIGNEE(S): The General Hospital Corporation, Boston, MA, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5843728	981201
APPLICATION INFO.:	US 95-417495	950405 (8)

RELATED APPLN. INFO.: Continuation of Ser. No. US 94-203866, filed on 28 Feb 1994, now abandoned which is a continuation of Ser. No. US 92-847566, filed on 6

Mar 1992, now abandoned which is a continuation-in-part of Ser. No. US 91-665961, filed on 7 Mar 1991, now abandoned
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Carlson, Karen Cochrane
LEGAL REPRESENTATIVE: Clark & Elbing LLP
NUMBER OF CLAIMS: 55
EXEMPLARY CLAIM: 32
NUMBER OF DRAWINGS: 45 Drawing Figure(s); 22 Drawing Page(s)
LINE COUNT: 2812
AB Disclosed is a method of directing a cellular response in a mammal by expressing in a cell of the mammal a chimeric receptor which causes the cells to specifically recognize and destroy an infective agent, a cell infected with an infective agent, a tumor or cancerous cell, or an autoimmune-generated cell. Also disclosed are cells which express the chimeric receptors and DNA encoding the chimeric receptors.

L14 ANSWER 4 OF 18 USPATFULL
ACCESSION NUMBER: 1998:150689 USPATFULL
TITLE: **Allergenic** proteins and peptides from dog dander and uses therefor
INVENTOR(S): Morgenstern, Jay P., Boston, MA, United States
Konieczny, Andrzej, Belmont, MA, United States
Bizinkauskas, Christine B., Dorchester, MA, United States
Brauer, Andrew W., Salem, MA, United States
PATENT ASSIGNEE(S): ImmuLogic Pharmaceutical Corporation, Waltham, MA, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5843672	981201
APPLICATION INFO.:	US 95-467603	950606 (8)

RELATED APPLN. INFO.: Division of Ser. No. US 93-156549, filed on 22 Nov 1993 which is a continuation-in-part of Ser. No. US 92-999712, filed on 31 Dec 1992, now abandoned
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Grimes, Eric
LEGAL REPRESENTATIVE: Hanley, Elizabeth A.; Mandragouras, Amy E.Lahive & Cockfield, LLP
NUMBER OF CLAIMS: 19
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 29 Drawing Figure(s); 28 Drawing Page(s)
LINE COUNT: 2850
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Isolated nucleic acids encoding **allergens** of Canis familiaris, Can f I or Can f II, are disclosed. A cDNA encoding a peptide having a Can f I activity and a predicted molecular weight of about 19,200 daltons is also described. A cDNA encoding a peptide having Can f II activity and a predicted molecular weight of about 18,200 daltons is also disclosed. The nucleic acids can be used as probes to detect the presence of Can f I or Can f II nucleic acid in a sample or for the recombinant production of peptides having a Can f I or Can f II activity. Peptides having a Can f I or Can f II activity can be used in compositions suitable for pharmaceutical administration or methods of diagnosing sensitivity to dog dander.

L14 ANSWER 5 OF 18 USPATFULL
ACCESSION NUMBER: 1998:143654 USPATFULL
TITLE: Therapeutic compounds comprised of anti-Fc receptor **antibodies**
INVENTOR(S): Deo, Yashwant M., Audubon, PA, United States
Goldstein, Joel, Edison, NJ, United States
Graziano, Robert, Frenchtown, NJ, United States
Somasundaram, Chezian, Allentown, PA, United States
PATENT ASSIGNEE(S): Medarex, Inc., Annandale, NJ, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5837243	981117
APPLICATION INFO.:	US 96-661052	960607 (8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 95-484172, filed on 7 Jun 1995
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Feisee, Lila
ASSISTANT EXAMINER: Bansal, Geetha
LEGAL REPRESENTATIVE: Lahive & Cockfield, LLP
NUMBER OF CLAIMS: 18
EXEMPLARY CLAIM: 1,10
NUMBER OF DRAWINGS: 49 Drawing Figure(s); 29 Drawing Page(s)
LINE COUNT: 2332
AB Multispecific multivalent molecules which are specific to an Fc receptor (FcR), and therapeutic uses and therapeutic uses and methods for making the molecules are described.

L14 ANSWER 6 OF 18 USPATFULL
ACCESSION NUMBER: 1998:128081 USPATFULL
TITLE: Method for screening for targets for anti-inflammatory or anti-**allergic** agents
INVENTOR(S): Ravetch, Jeffrey V., New York, NY, United States
Kurosaki, Tomohiro, Fort Lee, NJ, United States
PATENT ASSIGNEE(S): Sloan-Kettering Institute for Cancer Research, New York, NY, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5824487	981020
APPLICATION INFO.:	US 95-542686	951013 (8)

RELATED APPLN. INFO.: Continuation of Ser. No. US 93-52269, filed on 23 Apr 1993, now abandoned
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Schwadron, Ronald B.
LEGAL REPRESENTATIVE: White, John P.
NUMBER OF CLAIMS: 9
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 44 Drawing Figure(s); 20 Drawing Page(s)
LINE COUNT: 999
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB This invention provides a method for identifying a cellular protein capable of specifically binding to an activated **antibody** receptor, whose cytoplasmic domain comprising an ARH1 motif, comprising (a) obtaining cells comprising receptors having the ARH1 motif; (b) lysing the cells under conditions whereby the native complex of the receptor having the ARH1 motif and the cellular protein is preserved;(c) isolating the complex; and (d) testing the associated receptor and the protein for biochemical activities, thereby identifying the cellular protein capable of specifically binding to an activated **antibody** receptor, whose cytoplasmic domain comprising an ARH1 motif. This invention further provides a method for identifying a cellular molecule capable of being a target for designing drugs for autoimmune disease, inflammation or **allergy** which comprises (a) contacting a cell lysate with a molecule having a motif of amino acid sequence, AENTITYSLLKHP under the conditions permitting formation of a complex between the cellular target molecule with the motif; (b) isolating the complex formed in step (a); and (c) testing the complex for biochemical activities, thereby identifying the cellular molecule capable of being a target for designing drugs for autoimmune disease, inflammation or **allergy**.

L14 ANSWER 7 OF 18 USPATFULL
ACCESSION NUMBER: 1998:112061 USPATFULL
TITLE: Isolation, characterization, and use of the human and subunit of the high affinity receptor for immunoglobulin E
INVENTOR(S): Kinet, Jean-Pierre, Bethesda, MD, United States
Jouvin, Marie-Helene, Bethesda, MD, United States
PATENT ASSIGNEE(S): The United States of America as represented by the Department of Health and Human Services, Washington, DC, United States (U.S. government)

	NUMBER	DATE
PATENT INFORMATION:	US 5807988	980915
APPLICATION INFO.:	US 94-201879	940224 (8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 92-869933, filed on 16 Apr 1992
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Ulm, John
LEGAL REPRESENTATIVE: Klarquist Sparkman Campbell Leigh & Whinston, LLP
NUMBER OF CLAIMS: 6
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 37 Drawing Figure(s); 29 Drawing Page(s)
LINE COUNT: 2189
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to nucleic acid sequences, encoding amino acid sequences of the .beta., and subunit of the human high affinity receptor for immunoglobulin E, and for amino acid sequences of the subunit. A segment of the amino acid sequence containing an antigen recognition activation motif (ARAM) that exhibits different functions than other ARAMS, including that of the ARAM-.gamma. subunit of **Fc.epsilon.**
RI. The invention further relates to a method of producing the receptor by expressing cDNA for its a, .beta., and .gamma. subunits in a host cell simultaneously. Aspects of the invention are methods and compositions to **inhibit** the function of the human beta subunit, thereby treating or preventing **allergic** reactions.

L14 ANSWER 8 OF 18 USPATFULL
ACCESSION NUMBER: 1998:72429 USPATFULL
TITLE: Isolation characterization, and use of the human beta subunit of the high affinity receptor for immunoglobulin E
INVENTOR(S): Kinet, Jean Pierre, Bethesda, MD, United States
PATENT ASSIGNEE(S): The United States of America as represented by the Department of Health and Human Services, Washington, DC, United States (U.S. government)

	NUMBER	DATE
PATENT INFORMATION:	US 5770396	980623
APPLICATION INFO.:	US 92-869933	920416 (7)

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Ulm, John
LEGAL REPRESENTATIVE: Klarquist Sparkman Campbell Leigh & Whinston, LLP
NUMBER OF CLAIMS: 20
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 60 Drawing Figure(s); 52 Drawing Page(s)
LINE COUNT: 2759
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to nucleic acid sequences, encoding amino acid sequences of the .alpha., .beta., and .gamma. subunits of the high affinity receptor for immunoglobulin E, and for amino acid sequences of the subunits. The invention further relates to a method of producing the receptor by expressing cDNA for its .alpha., .beta., and .gamma. subunits in a host cell simultaneously. Aspects of the invention are methods and compositions to **inhibit** the function of the human beta subunit, thereby treating or preventing **allergic** reactions.

L14 ANSWER 9 OF 18 USPATFULL
ACCESSION NUMBER: 1998:11885 USPATFULL
TITLE: Methods for diagnosis of **allergy**
INVENTOR(S): Wai Fei, David Tai, Belmont, CA, United States
Lowe, John, Daly City, CA, United States
Jardieu, Paula, San Francisco, CA, United States
PATENT ASSIGNEE(S): Genentech, Inc., South San Francisco, CA, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5714338	980203
	WO 9516203	950615

APPLICATION INFO.: US 95-393014 950227 (8)
WO 94-US14282941209
950227 PCT 371 date
950227 PCT 102(e) date
RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 93-165436, filed on 10 Dec 1993, now abandoned
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Chan, Christina Y.
ASSISTANT EXAMINER: VanderVegt, F. Pierre
LEGAL REPRESENTATIVE: Love, Richard B.
NUMBER OF CLAIMS: 15
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 20 Drawing Figure(s); 11 Drawing Page(s)
LINE COUNT: 2478
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Provided are methods for the diagnosis of **allergic** disease wherein IgE specific for an **allergen** of interest is detected in a patient serum sample by using the patient serum sample to sensitize in the presence or absence of an IgE antagonist a **mast cell** or basophil host genetically engineered to display surface expression of a **Fc.epsilon.RI** subunit that is capable of mediating the host cells release of a pharmacological mediator upon induction with patient serum and **allergen**, challenging the sensitized host cells with the **allergen** of interest, and determining the presence or absence of IgE specific to the **allergen** of interest in the patient serum sample by comparing the release of the pharmacological mediator produced by host cells sensitized with patient serum in the presence of the IgE antagonist to the release of the pharmacological mediator produced by host cells sensitized with patient serum in the absence of the IgE antagonist.

L14 ANSWER 10 OF 18 USPATFULL
ACCESSION NUMBER: 97:104615 USPATFULL
TITLE: High-affinity oligonucleotide ligands to immunoglobulin E (IgE)
INVENTOR(S): Wiegand, Torsten Walter, Boulder, CO, United States
Tasset, Diane, Boulder, CO, United States
Gold, Larry, Boulder, CO, United States
PATENT ASSIGNEE(S): NeXstar Pharmaceuticals, Inc., Boulder, CO, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5686592	971111
APPLICATION INFO.:	US 95-471985	950606 (8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 91-714131, filed on 10 Jun 1991, now patented, Pat. No. US 5475096 which is a continuation-in-part of Ser. No. US 90-536428, filed on 11 Jun 1990, now abandoned And Ser. No. US 92-964624, filed on 21 Oct 1992, now patented, Pat. No. US 5496938 And Ser. No. US 94-317403, filed on 3 Oct 1994
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Zitomer, Stephanie W.
LEGAL REPRESENTATIVE: Swanson & Bratschun LLC
NUMBER OF CLAIMS: 7
EXEMPLARY CLAIM: 1
LINE COUNT: 1740
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB This invention discloses high-affinity oligonucleotide ligands to human Immunoglobulin E (IgE), specifically RNA and ssDNA ligands having the ability to bind to IgE, and the methods for obtaining such ligands. The ligands are capable of **inhibiting** the interaction of IgE with its receptor.

L14 ANSWER 11 OF 18 USPATFULL
ACCESSION NUMBER: 97:86732 USPATFULL
TITLE: **Allergen**-specific human IgA **monoclonal antibodies** for mucosal administration
INVENTOR(S): Chang, Tse Wen, Houston, TX, United States
PATENT ASSIGNEE(S): Tanox Biosystems, Inc., Houston, TX, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5670626	970923
APPLICATION INFO.:	US 94-263258	940621 (8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 92-994126, filed on 21 Dec 1992, now abandoned
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Scheiner, Toni R.
LEGAL REPRESENTATIVE: Mirabel, Eric P.
NUMBER OF CLAIMS: 2
EXEMPLARY CLAIM: 1,2
LINE COUNT: 765
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Disclosed are pharmaceutical preparations containing human **monoclonal IgA antibodies** specific for major **allergenic** proteins found in ragweed, house dust mites, and cat and dog dander. Also disclosed are constructs comprising physiological compatible polymer backbones or microbeads and a plurality of covalently conjugated **allergen**-specific binding molecules. Such binding molecules are IgG or IgA, or their F(ab').sub.2, Fab, or Fv fragments, specific to the major **allergenic** proteins mentioned above. Also disclosed are methods for treating a patient with **allergic** rhinitis, asthma, or conjunctivitis by applying a pharmaceutical preparation containing the **antibodies** specific for the **allergenic** molecules, to which the patient is sensitized, to the patient's affected mucosal tissues, such as the nasal linings, the respiratory tract, or the eyes.

L14 ANSWER 12 OF 18 USPATFULL
ACCESSION NUMBER: 97:70719 USPATFULL
TITLE: Method of treatment of parasitic infection using IgE antagonists
INVENTOR(S): Amiri, Payman, San Francisco, CA, United States
Haak-Frendscho, Mary, Fitchburg, WI, United States
Jardieu, Paula M., Berkeley, CA, United States
PATENT ASSIGNEE(S): Genentech, Inc., South San Francisco, CA, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5656273	970812
APPLICATION INFO.:	US 95-422748	950414 (8)

RELATED APPLN. INFO.: Continuation of Ser. No. US 94-184083, filed on 18 Jan 1994, now abandoned
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Scheiner, Toni R.
LEGAL REPRESENTATIVE: Fitts, Renee A.; Teskin, Robin L.; Svoboda, Craig G.
NUMBER OF CLAIMS: 29
EXEMPLARY CLAIM: 28
NUMBER OF DRAWINGS: 9 Drawing Figure(s); 5 Drawing Page(s)
LINE COUNT: 858
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB This invention concerns a method for the prevention and treatment of parasitic infection by administering an IgE antagonists. The invention further concerns pharmaceutical compositions and bispecific molecules useful in such method.

L14 ANSWER 13 OF 18 USPATFULL
ACCESSION NUMBER: 97:49515 USPATFULL
TITLE: Method to detect protein-protein interactions
INVENTOR(S): Dalton, Stephen, Bloomfield, NJ, United States
Kochan, Jarema P., Verona, NJ, United States
Osborne, Mark A., South Brunswick, NJ, United States
PATENT ASSIGNEE(S): Hoffmann-La Roche Inc., Nutley, NJ, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5637463	970610
APPLICATION INFO.:	US 95-434730	950504 (8)

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Ketter, James
ASSISTANT EXAMINER: Brusca, John S.
LEGAL REPRESENTATIVE: Johnston, George W.; Rocha-Tramaloni, Patricia S.; Semionow, Raina
NUMBER OF CLAIMS: 20
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 11 Drawing Figure(s); 10 Drawing Page(s)
LINE COUNT: 1264
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Methods are provided for studying protein-protein interactions which require posttranslational modification of one of the proteins. The interaction is detected by reconstituting the activity of a transcriptional activator. This activity is dependent on the interactions between three different proteins. These include two chimeric proteins, one of which must be posttranslationally modified by the activity of the third protein in order for the chimeric proteins to interact. One of the chimeric proteins contains a transcriptional activation domain fused to a test protein. The second chimeric protein contains a DNA-binding domain of a transcriptional activator fused to the other test protein.

L14 ANSWER 14 OF 18 USPATFULL
ACCESSION NUMBER: 97:40635 USPATFULL
TITLE: High-affinity oligonucleotide ligands to immunoglobulin E (IgE)
INVENTOR(S): Wiegand, Torsten W., Boulder, CO, United States
Tasset, Diane, Boulder, CO, United States
Gold, Larry, Boulder, CO, United States
PATENT ASSIGNEE(S): NeXstar Pharmaceuticals, Inc., Boulder, CO, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5629155	970513
APPLICATION INFO.:	US 94-317403	941003 (8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 91-714131, filed on 10 Jun 1991, now patented, Pat. No. US 5475096 which is a continuation-in-part of Ser. No. US 90-536428, filed on 11 Jun 1990, now abandoned And a continuation-in-part of Ser. No. US 92-964624, filed on 21 Oct 1992, now patented, Pat. No. US 5496938
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Zitomer, Stephanie W.
LEGAL REPRESENTATIVE: Swanson & Bratschun, L.L.C.
NUMBER OF CLAIMS: 5
EXEMPLARY CLAIM: 1
LINE COUNT: 1019
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB This invention discloses high-affinity oligonucleotide ligands to human Immunoglobulin E (IgE), specifically RNA ligands having the ability to bind to IgE, and the methods for obtaining such ligands. The ligands are capable of **inhibiting** the interaction of IgE with its receptor.

L14 ANSWER 15 OF 18 USPATFULL
ACCESSION NUMBER: 97:1542 USPATFULL
TITLE: Expression of specific immunogens using viral antigens
INVENTOR(S): Hung, Paul P., Bryn Mawr, PA, United States
Lee, Shaw-Guang L., Villanova, PA, United States
Kalyan, Narender K., Wayne, PA, United States
PATENT ASSIGNEE(S): American Home Products Corporation, Madison, NJ, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5591823	970107
APPLICATION INFO.:	US 93-169813	931217 (8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 91-805105, filed on 11 Dec 1991, now abandoned
DOCUMENT TYPE: Utility

PRIMARY EXAMINER: Smith, Lynette F.
LEGAL REPRESENTATIVE: Jackson, Richard K.
NUMBER OF CLAIMS: 9
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 2 Drawing Figure(s); 2 Drawing Page(s)
LINE COUNT: 1122
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Chimeric DNA fragments are provided which include a nucleotide sequence substantially the same as that which codes for the HA surface protein of an influenza A virus having five immunodominant antigenic sites, wherein a nucleotide sequence substantially the same as that which codes for a foreign epitope is inserted into the nucleotide sequence of an antigenic site. Corresponding chimeric peptides, expression vectors, and transformed hosts are provided as well. These peptides are useful in providing vaccines against the respective antigens and in test kits to detect the exposure to such antigens. Additionally, these peptides or their corresponding **antibodies** are useful in methods of treatment and prevention of the manifestations of exposure to these antigens, including immunotherapy.

L14 ANSWER 16 OF 18 USPATFULL
ACCESSION NUMBER: 96:70190 USPATFULL
TITLE: Treating hypersensitivities with anti-IGE **monoclonal antibodies** which bind to IGE-expressing B cells but not basophils
INVENTOR(S): Chang, Tse W., Houston, TX, United States
PATENT ASSIGNEE(S): Tanox Biosystems, Inc., Houston, TX, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5543144	960806
APPLICATION INFO.:	US 93-7180	930121 (8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 89-357483, filed on 26 May 1989, now patented, Pat. No. US 5420251 which is a continuation-in-part of Ser. No. US 88-291068, filed on 28 Dec 1988, now abandoned which is a continuation-in-part of Ser. No. US 88-226421, filed on 29 Jul 1988, now patented, Pat. No. US 5422258 which is a continuation-in-part of Ser. No. US 87-140036, filed on 31 Dec 1987, now abandoned
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Hutzell, Paula K.
LEGAL REPRESENTATIVE: Mirabel, Eric P.
NUMBER OF CLAIMS: 6
EXEMPLARY CLAIM: 1
LINE COUNT: 1762
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention relates to methods of treating **allergic** reactions and of **reducing** circulating IgE using **antibodies** which bind to secreted IgE and membrane-bound IgE on the surface of IgE-producing B cells but not to IgE on basophils or **mast cells**.

L14 ANSWER 17 OF 18 USPATFULL
ACCESSION NUMBER: 95:58235 USPATFULL
TITLE: Chimeric anti-human IgE-**monoclonal antibody** which binds to secreted IgE and membrane-bound IgE expressed by IgE-expressing B cells but notto IgE bound to FC receptors on basophils
INVENTOR(S): Chang, Tse-wen, Houston, TX, United States
PATENT ASSIGNEE(S): Tanox Biosystems, Inc., Houston, TX, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5428133	950627
APPLICATION INFO.:	US 91-809034	911211 (7)

RELATED APPLN. INFO.: Continuation of Ser. No. US 88-291068, filed on 28 Dec 1988, now abandoned which is a continuation-in-part of Ser. No. US 88-226421, filed on 29 Jul 1988 which is a continuation-in-part of Ser. No. US 87-140036, filed on 31 Dec 1987, now abandoned
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Hutzell, Paula
LEGAL REPRESENTATIVE: Mirabel, Eric P.; DeConti, Giulio A.
NUMBER OF CLAIMS: 2
EXEMPLARY CLAIM: 1
LINE COUNT: 1266
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB **Chimeric antibodies** which bind to unique antigenic epitopes of IgE (designated ige.b1) which are present on IgE-bearing B lymphocytes but not basophils are described.

L14 ANSWER 18 OF 18 USPATFULL
ACCESSION NUMBER: 94:93425 USPATFULL
TITLE: Chimeric chains for receptor-associated signal transduction pathways
INVENTOR(S): Capon, Daniel J., Hillsborough, CA, United States
Weiss, Arthur, Mill Valley, CA, United States
Irving, Brian A., San Francisco, CA, United States
Roberts, Margo R., San Francisco, CA, United States
Zsebo, Krisztina, Woodside, CA, United States
PATENT ASSIGNEE(S): Cell Genesys, Inc., Foster City, CA, United States (U.S. corporation)
The Regents of the University of California, Oakland, CA, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5359046	941025
APPLICATION INFO.:	US 92-988194	921209 (7)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 90-627643, filed on 14 Dec 1990, now abandoned
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Hill, Jr., Robert J.
ASSISTANT EXAMINER: Wang, Gian P.
LEGAL REPRESENTATIVE: Rowland, Bertram I.
NUMBER OF CLAIMS: 21
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 41 Drawing Figure(s); 10 Drawing Page(s)
LINE COUNT: 2058
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Chimeric proteins and DNA sequence encoding chimeric proteins are provided, where the chimeric proteins are characterized by an extracellular domain capable of binding to a ligand in a non-MHC restricted manner, a transmembrane domain and a cytoplasmic domain capable of activating a signaling pathway. The extracellular domain and cytoplasmic domain are not naturally found together. Binding of ligand to the extracellular domain results in transduction of a signal and activation of a signaling pathway in the cell, whereby the cell may be induced to carry out various functions relating to the signalling pathway. A wide variety of extracellular domains may be employed as receptors, where such domains may be naturally occurring or synthetic. The chimeric DNA sequences may be used to modify lymphocytes as well as hematopoietic stem cells as precursors to a number of important cell types.

=> s l12

10380 MAST
1876 MASTS
10896 MAST
(MAST OR MASTS)
220814 CELL
178765 CELLS
263654 CELL
(CELL OR CELLS)
1910 MAST CELL
(MAST(W)CELL)
332 BASOPHIL
892 BASOPHILS
993 BASOPHIL
(BASOPHIL OR BASOPHILS)
16278 FC
4493 FCS
20063 FC
(FC OR FCS)
41540 EPSILON
4 EPSILONS
41540 EPSILON
(EPSILON OR EPSILONS)
99 FC.EPSILON.
(FC(W)EPSILON)
2552 IGE
70 IGES
2600 IGE
(IGE OR IGES)
30484 RECEPTOR
20187 RECEPTORS
36144 RECEPTOR
(RECEPTOR OR RECEPTORS)
130 IGE(W) RECEPTOR
32647 ANTIBOD?
15542 MONOCLON?
4238 CHIMERIC
24 CHIMERICS
4238 CHIMERIC
(CHIMERIC OR CHIMERICS)
32647 ANTIBOD?
1183 CHIMERIC(W) ANTIBOD?
4238 CHIMERIC
24 CHIMERICS
4238 CHIMERIC
(CHIMERIC OR CHIMERICS)
15542 MONOCLON?
110 CHIMERIC(W) MONOCLON?
14881 ALLERG?
265102 INHIB?
1389860 REDUC?
11341 AMELIORAT?
65071 COMPET?
L15 86 (L2 OR BASOPHIL) AND L3 AND (ANTIBOD? OR MONOCLON? OR CHIMERIC(W) ANTIBOD? OR CHIMERIC(W) MONOCLON?) AND ALLERG? AND (INHIB? OR REDUC? OR AMELIORAT? OR COMPET?)

=> d l15 1-86 ibib ab

L15 ANSWER 1 OF 86 USPATFULL
ACCESSION NUMBER: 1998:162028 USPATFULL
TITLE: Liposomes, method of preparing the same and use thereof in the preparation of drugs
INVENTOR(S): Maierhofer, Gunther, Munich, Germany, Federal Republic of
Hofer, Paul, Dietersheim, Germany, Federal Republic of
Rottmann, Oswald, Freising, Germany, Federal Republic of
PATENT ASSIGNEE(S): Dianorm G. Maierhofer GmbH, Munich, Germany, Federal Republic of (non-U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5853753	981229
APPLICATION INFO.:	US 97-800802	970218 (8)

RELATED APPLN. INFO.: Continuation of Ser. No. US 95-367128, filed on 6 Jan 1995, now abandoned

	NUMBER	DATE
PRIORITY INFORMATION:	DE 92-422447	920708
	DE 92-4232231	920925

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Kishore, Gollamudi S.
LEGAL REPRESENTATIVE: Sughrue, Mion, Zinn, Macpeak & Seas, PLLC

NUMBER OF CLAIMS: 10
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 12 Drawing Figure(s); 10 Drawing Page(s)
LINE COUNT: 1895
AB The present invention relates to liposomes which can be obtained by mixing bilayer-forming lipids containing, at least in part, unsaturated fatty-acid chains, with an aqueous solution of bile acid and/or at least one derivative thereof and supplying mechanical energy, wherein before mixing, the lipids are present either as such or dissolved in water-miscible solvent. The invention further relates to a method of preparing such liposomes and their use in the preparation of drugs.

L15 ANSWER 2 OF 86 USPATFULL
ACCESSION NUMBER: 1998:159760 USPATFULL
TITLE: Targeted cytolysis of HIV-infected cells by chimeric CD4 receptor-bearing cells
INVENTOR(S): Seed, Brian, Boston, MA, United States
Banapour, Babak, Boston, MA, United States
Romeo, Charles, Belmont, MA, United States
Kolanus, Waldemar, Watertown, MA, United States
PATENT ASSIGNEE(S): The General Hospital Corporation, Boston, MA, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5851828	981222
APPLICATION INFO.:	US 94-284391	940802 (8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 94-195395, filed on 14 Feb 1994, now abandoned which is a continuation-in-part of Ser. No. US 92-847566, filed on 6 Mar 1992, now abandoned which is a continuation-in-part of Ser. No. US 91-665961, filed on 7 Mar 1991, now abandoned
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Budens, Robert D.
LEGAL REPRESENTATIVE: Clark & Elbing LLP
NUMBER OF CLAIMS: 15
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 56 Drawing Figure(s); 27 Drawing Page(s)
LINE COUNT: 3012
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Disclosed is a method of directing a cellular immune response against an HIV-infected cell in a mammal involving administering to the mammal an effective amount of therapeutic cells which express a membrane-bound, proteinaceous chimeric receptor comprising (a) an extracellular portion which includes a fragment of CD4 which is capable of specifically recognizing and binding the HIV-infected cell but which does not mediate HIV infection and (b) an intracellular portion which is capable of signalling the therapeutic cell to destroy the receptor-bound HIV-infected cell. Also disclosed are cells which express the chimeric receptors and DNA and vectors encoding the chimeric receptors.

L15 ANSWER 3 OF 86 USPATFULL
ACCESSION NUMBER: 1998:159720 USPATFULL
TITLE: Product and process to regulate actin polymerization
INVENTOR(S): Johnson, Gary L., Boulder, CO, United States
PATENT ASSIGNEE(S): National Jewish Center For Immunology and Respiratory Medicine, Denver, CO, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5851786	981222
APPLICATION INFO.:	US 95-534694	950927 (8)

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Leary, Louise
LEGAL REPRESENTATIVE: Lahive & Cockfield, LLP; DeConti, Jr., Giulio A.; Kara, Catherine J.
NUMBER OF CLAIMS: 43
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 6 Drawing Figure(s); 6 Drawing Page(s)
LINE COUNT: 1622
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to methods useful for identifying compounds capable of specifically regulating actin polymerization, stress fiber formation or focal adhesion assembly by regulating G.sub..alpha.12 and/or G.sub..alpha.13 activity in cells involved in inflammatory responses, immune responses, allergic responses and neuronal responses, kits to perform such assays and methods to control disease related to such responses.

L15 ANSWER 4 OF 86 USPATFULL
ACCESSION NUMBER: 1998:150744 USPATFULL
TITLE: Redirection of cellular immunity by receptor chimeras
INVENTOR(S): Seed, Brian, Boston, MA, United States
Romeo, Charles, Belmont, MA, United States
Kolanus, Waldemar, Watertown, MA, United States
PATENT ASSIGNEE(S): The General Hospital Corporation, Boston, MA, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5843728	981201
APPLICATION INFO.:	US 95-417495	950405 (8)

RELATED APPLN. INFO.: Continuation of Ser. No. US 94-203866, filed on 28 Feb 1994, now abandoned which is a continuation of Ser. No. US 92-847566, filed on 6 Mar 1992, now abandoned which is a continuation-in-part of Ser. No. US 91-665961, filed on 7 Mar 1991, now abandoned
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Carlson, Karen Cochrane
LEGAL REPRESENTATIVE: Clark & Elbing LLP
NUMBER OF CLAIMS: 55
EXEMPLARY CLAIM: 32
NUMBER OF DRAWINGS: 45 Drawing Figure(s); 22 Drawing Page(s)
LINE COUNT: 2812
AB Disclosed is a method of directing a cellular response in a mammal by expressing in a cell of the mammal a chimeric receptor which causes the cells to specifically recognize and destroy an infective agent, a cell infected with an infective agent, a tumor or cancerous cell, or an autoimmune-generated cell. Also disclosed are cells which express the chimeric receptors and DNA encoding the chimeric receptors.

L15 ANSWER 5 OF 86 USPATFULL
ACCESSION NUMBER: 1998:150689 USPATFULL
TITLE: Allergenic proteins and peptides from dog dander and uses therefor
INVENTOR(S): Morgenstern, Jay P., Boston, MA, United States
Konieczny, Andrzej, Belmont, MA, United States
Bizinkauskas, Christine B., Dorchester, MA, United States
Brauer, Andrew W., Salem, MA, United States
PATENT ASSIGNEE(S): ImmuLogic Pharmaceutical Corporation, Waltham, MA, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5843672	981201
APPLICATION INFO.:	US 95-467603	950606 (8)

RELATED APPLN. INFO.: Division of Ser. No. US 93-156549, filed on 22 Nov 1993 which is a continuation-in-part of Ser. No. US 92-999712, filed on 31 Dec 1992, now abandoned
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Grimes, Eric
LEGAL REPRESENTATIVE: Hanley, Elizabeth A.; Mandragouras, Amy E.Lahive & Cockfield, LLP
NUMBER OF CLAIMS: 19
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 29 Drawing Figure(s); 28 Drawing Page(s)
LINE COUNT: 2850
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Isolated nucleic acids encoding allergens of Canis familiaris, Can f l or Can f ll, are disclosed. A cDNA encoding a peptide having a Can f l activity and a predicted molecular weight of about 19,200 daltons is also described. A cDNA encoding a peptide having Can f ll activity and a predicted molecular weight of about 18,200 daltons is also disclosed. The nucleic acids can be used as probes to detect the presence of Can f l or Can f ll nucleic acid in a sample or for the recombinant production of peptides having a Can f l or Can f ll activity. Peptides having a Can f l or Can f ll activity can be used in compositions suitable for pharmaceutical administration or methods of diagnosing sensitivity to dog dander.

L15 ANSWER 6 OF 86 USPATFULL
ACCESSION NUMBER: 1998:147580 USPATFULL
TITLE: DNA encoding interleukin-4 receptors
INVENTOR(S): Mosley, Bruce, Seattle, WA, United States
Cosman, David J., Seattle, WA, United States
Park, Linda, Seattle, WA, United States
Beckmann, M. Patricia, Poulsbo, WA, United States
March, Carl J., Seattle, WA, United States
Idzerda, Rejean, Seattle, WA, United States
PATENT ASSIGNEE(S): Immunex Corporation, Seattle, WA, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5840869	981124
APPLICATION INFO.:	US 90-480694	900214 (7)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 89-370924, filed on 23 Jun 1989, now abandoned which is a continuation-in-part of Ser. No. US 89-326156, filed on 20 Mar 1989, now abandoned which is a continuation-in-part of Ser. No. US 89-319438, filed on 2 Mar 1989, now abandoned which is a continuation-in-part of Ser. No. US 88-265047, filed on 31 Oct 1988, now abandoned
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Draper, Garnette D.
LEGAL REPRESENTATIVE: Foley & Lardner
NUMBER OF CLAIMS: 12
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 37 Drawing Figure(s); 21 Drawing Page(s)
LINE COUNT: 2554
AB Mammalian Interleukin-4 receptor proteins, DNAs and expression vectors encoding mammalian IL-4 receptors, and processes for producing mammalian IL-4 receptors as products of cell culture, are disclosed. A method for suppressing an IL-4-dependent immune or inflammatory response in a mammal, including a human, by administering an effective amount of soluble IL-4 receptor (sIL-4R) and a suitable diluent or carrier.

L15 ANSWER 7 OF 86 USPATFULL
ACCESSION NUMBER: 1998:143897 USPATFULL
TITLE: Human galectins
INVENTOR(S): Hillman, Jennifer L., San Jose, CA, United States
Goli, Surya K., Sunnyvale, CA, United States
Bandman, Olga, Mountain View, CA, United States
Hawkins, Phillip R., Mountain View, CA, United States
Petithory, Joanne R., Fremont, CA, United States
PATENT ASSIGNEE(S): Incyte Pharmaceuticals, Inc., Palo Alto, CA, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5837493	981117
APPLICATION INFO.:	US 97-788584	970123 (8)

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Feisee, Lila
ASSISTANT EXAMINER: Sun-Hoffman, Lin
LEGAL REPRESENTATIVE: Billings, Lucy J.Incyte Pharmaceuticals, Inc.
NUMBER OF CLAIMS: 9
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 9 Drawing Figure(s); 7 Drawing Page(s)
LINE COUNT: 2236

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides two novel human galectins (designated individually as GAL-5HA and GAL-5HB, and collectively as GAL-5H) and polynucleotides which identify and encode GAL-5H. The invention also provides genetically engineered expression vectors and host cells comprising the nucleic acid sequences encoding GAL-5H and a method for producing GAL-5H. The invention also provides for use of GAL-5H and agonists, **antibodies**, or antagonists specifically binding GAL-5H, in the prevention and treatment of diseases associated with expression of GAL-5H. Additionally, the invention provides for the use of antisense molecules to polynucleotides encoding GAL-5H for the treatment of diseases associated with the expression of GAL-5H. The invention also provides diagnostic assays which utilize the polynucleotide, or fragments or the complement thereof, and **antibodies** specifically binding GAL-5H.

L15 ANSWER 8 OF 86 USPATFULL
ACCESSION NUMBER: 1998:143654 USPATFULL
TITLE: Therapeutic compounds comprised of anti-Fc receptor **antibodies**
INVENTOR(S): Deo, Yashwant M., Audubon, PA, United States
Goldstein, Joel, Edison, NJ, United States
Graziano, Robert, Frenchtown, NJ, United States
Somasundaram, Chezian, Allentown, PA, United States
PATENT ASSIGNEE(S): Medarex, Inc., Annandale, NJ, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5837243	981117
APPLICATION INFO.:	US 96-661052	960607 (8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 95-484172, filed on 7 Jun 1995
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Feisee, Lila
ASSISTANT EXAMINER: Bansal, Geetha
LEGAL REPRESENTATIVE: Lahive & Cockfield, LLP
NUMBER OF CLAIMS: 18
EXEMPLARY CLAIM: 1,10
NUMBER OF DRAWINGS: 49 Drawing Figure(s); 29 Drawing Page(s)
LINE COUNT: 2332
AB Multispecific multivalent molecules which are specific to an Fc receptor (FcR), and therapeutic uses and therapeutic uses and methods for making the molecules are described.

L15 ANSWER 9 OF 86 USPATFULL
ACCESSION NUMBER: 1998:134909 USPATFULL
TITLE: Creating novel hematopoietic cell lines by expressing altered retinoic acid receptors
INVENTOR(S): Tsai, Schickwann, Redmond, WA, United States
Collins, Steven J., Seattle, WA, United States
PATENT ASSIGNEE(S): Fred Hutchinson Cancer Research Center, Seattle, WA, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5830760	981103
	WO 9504143	950209
APPLICATION INFO.:	US 96-592383	960126 (8)
	WO 94-US8450	940728
	960126	PCT 371 date
	960126	PCT 102(e) date

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 93-99242, filed on 28 Jul 1993, now abandoned
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Walsh, Stephen
ASSISTANT EXAMINER: Pak, Michael D.
LEGAL REPRESENTATIVE: Christensen O'Connor Johnson & Kindness PLLC
NUMBER OF CLAIMS: 12
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 64 Drawing Figure(s); 35 Drawing Page(s)
LINE COUNT: 2675
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Methods for establishing continuous SCF dependent lympho-hematopoietic progenitor cell lines capable of differentiating into erythroid, myeloid, and B lymphocytic lineages, and GM-CSF dependent neutrophil progenitor cell lines capable of differentiating into neutrophils but not into monocytes, **mast cells**, or **basophils**, by introducing into bone marrow, fetal spleen, fetal liver, or other hematopoietic myeloid cells nucleic acid encoding a dominant negative suppressor of a retinoic acid receptor-alpha and a selectable marker, and culturing the recombinant cells in culture medium containing SCF or GM-CSF, agents allowing for selective growth of the recombinant cells, and a level of retinoic acid of less than about 10.sup.-8 M to about 10.sup.-9 M in the case of establishing neutrophilic progenitor cell lines. Addition of a retinol compound induces the latter cell line to differentiate into neutrophils.

L15 ANSWER 10 OF 86 USPATFULL
ACCESSION NUMBER: 1998:128081 USPATFULL
TITLE: Method for screening for targets for anti-inflammatory or anti-**allergic** agents
INVENTOR(S): Ravetch, Jeffrey V., New York, NY, United States
Kurosaki, Tomohiro, Fort Lee, NJ, United States
PATENT ASSIGNEE(S): Sloan-Kettering Institute for Cancer Research, New York, NY, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5824487	981020
APPLICATION INFO.:	US 95-542686	951013 (8)

RELATED APPLN. INFO.: Continuation of Ser. No. US 93-52269, filed on 23 Apr 1993, now abandoned
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Schwadron, Ronald B.
LEGAL REPRESENTATIVE: White, John P.
NUMBER OF CLAIMS: 9
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 44 Drawing Figure(s); 20 Drawing Page(s)
LINE COUNT: 999
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB This invention provides a method for identifying a cellular protein capable of specifically binding to an activated **antibody** receptor, whose cytoplasmic domain comprising an ARH1 motif, comprising (a) obtaining cells comprising receptors having the ARH1 motif; (b) lysing the cells under conditions whereby the native complex of the receptor having the ARH1 motif and the cellular protein is preserved;(c) isolating the complex; and (d) testing the associated receptor and the protein for biochemical activities, thereby identifying the cellular protein capable of specifically binding to an activated **antibody** receptor, whose cytoplasmic domain comprising an ARH1 motif. This invention further provides a method for identifying a cellular molecule capable of being a target for designing drugs for autoimmune disease, inflammation or **allergy** which comprises (a) contacting a cell lysate with a molecule having a motif of amino acid sequence, AENTITYSLLKHP under the conditions permitting formation of a complex between the cellular target molecule with the motif; (b) isolating the complex formed in step (a); and (c) testing the complex for biochemical activities, thereby identifying the cellular molecule capable of being a target for designing drugs for autoimmune disease, inflammation or **allergy**.

L15 ANSWER 11 OF 86 USPATFULL
ACCESSION NUMBER: 1998:119039 USPATFULL
TITLE: DNA spacer regulatory elements responsive to cytokines and methods for their use
INVENTOR(S): Seidel, H. Martin, San Diego, CA, United States
Lamb, I. Peter, San Diego, CA, United States
PATENT ASSIGNEE(S): Ligand Pharmaceuticals, Inc., San Diego, CA, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5814517	980929
APPLICATION INFO.:	US 4107799	950327 (8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. 228935, filed on 14 Apr 1994, now abandoned
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Chambers, Jasemine C.
ASSISTANT EXAMINER: Priebe, Scott D.
LEGAL REPRESENTATIVE: Elmer, J. Scott; Respess, William L.
NUMBER OF CLAIMS: 19
EXEMPLARY CLAIM: 1,10
NUMBER OF DRAWINGS: 6 Drawing Figure(s); 2 Drawing Page(s)
LINE COUNT: 2650
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides oligonucleotide sequences comprising DNA regulatory elements of the general sequence TTN.sub.X AA that bind activated transcriptional regulatory proteins in response to signaling molecules, such as cytokines. Further, the present invention also provides DNA constructs comprising the oligonucleotide sequences, cells transfected with the DNA constructs, and methods of using the DNA constructs and transfected cells to provide for the controlled expression of structural genes, for the detection and recovery of transcriptional regulatory proteins, and for measuring the ability of compounds to act as agonist and antagonists of gene transcription.

L15 ANSWER 12 OF 86 USPATFULL
ACCESSION NUMBER: 1998:112067 USPATFULL
TITLE: Fused polypeptides comprising interleukin-4 polypeptide fragments
INVENTOR(S): Lee, Frank, Palo Alto, CA, United States
Yokota, Takashi, Palo Alto, CA, United States
Arai, Ken-ichi, Palo Alto, CA, United States
Mosmann, Timothy, Atherton, CA, United States
Rennick, Donna, Los Altos, CA, United States
PATENT ASSIGNEE(S): Schering Corporation, Kenilworth, NJ, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5807996	980915
APPLICATION INFO.:	US 95-468735	950606 (8)

RELATED APPLN. INFO.: Division of Ser. No. US 94-221551, filed on 1 Apr 1994, now abandoned which is a continuation of Ser. No. US 93-27601, filed on 5 Mar 1993, now abandoned which is a continuation-in-part of Ser. No. US 92-854771, filed on 20 Mar 1992, now abandoned which is a continuation of Ser. No. US 90-615902, filed on 20 Nov 1990, now abandoned which is a division of Ser. No. US 86-908215, filed on 17 Sep 1986, now patented, Pat. No. US 5017691 which is a continuation-in-part of Ser. No. US 86-881553, filed on 3 Jul 1986, now abandoned which is a continuation-in-part of Ser. No. US 86-843958, filed on 25 Mar 1986, now patented, Pat. No. US 5552304 which is a continuation-in-part of Ser. No. US 85-799668, filed on 19 Nov 1985, now abandoned
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Kemmerer, Elizabeth C.
LEGAL REPRESENTATIVE: Dulak, Norman C.; Thampoe, Immac J.
NUMBER OF CLAIMS: 2
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 33 Drawing Figure(s); 24 Drawing Page(s)
LINE COUNT: 2831
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Mammalian proteins and muteins thereof, designated interleukin-4s (IL-4s), are provided which exhibit both B cell growth factor activity and T cell growth factor activity. Compounds of the invention include native human and murine IL-4s, muteins thereof, and nucleic acids which are effectively homologous to disclosed cDNAs, and/or which are capable of coding for mammalian IL-4s and their muteins.

L15 ANSWER 13 OF 86 USPATFULL

ACCESSION NUMBER: 1998:112061 USPATFULL
TITLE: Isolation, characterization, and use of the human and subunit of the high affinity receptor for immunoglobulin E
INVENTOR(S): Kinet, Jean-Pierre, Bethesda, MD, United States
Jouvin, Marie-Helene, Bethesda, MD, United States
PATENT ASSIGNEE(S): The United States of America as represented by the Department of Health and Human Services, Washington, DC, United States (U.S. government)

	NUMBER	DATE
PATENT INFORMATION:	US 5807988	980915
APPLICATION INFO.:	US 94-201879	940224 (8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 92-869933, filed on 16 Apr 1992
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Ulm, John
LEGAL REPRESENTATIVE: Klarquist Sparkman Campbell Leigh & Whinston, LLP
NUMBER OF CLAIMS: 6
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 37 Drawing Figure(s); 29 Drawing Page(s)
LINE COUNT: 2189
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to nucleic acid sequences, encoding amino acid sequences of the .beta., and subunit of the human high affinity receptor for immunoglobulin E, and for amino acid sequences of the subunit. A segment of the amino acid sequence containing an antigen recognition activation motif (ARAM) that exhibits different functions than other ARAMS, including that of the ARAM-.gamma. subunit of Fc.epsilon.RI. The invention further relates to a method of producing the receptor by expressing cDNA for its a, .beta., and .gamma. subunits in a host cell simultaneously. Aspects of the invention are methods and compositions to **inhibit** the function of the human beta subunit, thereby treating or preventing **allergic** reactions.

L15 ANSWER 14 OF 86 USPATFULL
ACCESSION NUMBER: 1998:88655 USPATFULL
TITLE: Isolation and characterization of **allergen**-binding cells for diagnosis of hypersensitivity
INVENTOR(S): Irsch, Johannes, Cologne, Germany, Federal Republic of
Miltenyi, Stefan, Bergisch Gladbach, Germany, Federal Republic of
Radbruch, Andreas, Cologne, Germany, Federal Republic of
PATENT ASSIGNEE(S): Miltenyi Biotec. GmbH, Bergisch Gladbach, Germany, Federal Republic of (non-U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5786161	980728
APPLICATION INFO.:	US 96-660035	960606 (8)

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Scheiner, Toni R.
LEGAL REPRESENTATIVE: Cooley Godward LLP
NUMBER OF CLAIMS: 18
EXEMPLARY CLAIM: 18
NUMBER OF DRAWINGS: 9 Drawing Figure(s); 4 Drawing Page(s)
LINE COUNT: 836
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Methods and compositions are provided for the diagnosis of **allergen** hypersensitivity in a patient. Rare, **allergen**-specific cells are enriched from a complex cell population, e.g. a patient blood sample. The percentage of blood cells that bind to a particular **allergen** is less than 0.01%. The **allergen**-specific cell population is enriched by magnetic cell sorting. In normal blood, the **allergen** -binding cells are primarily B-cells expressing CD19 and CD21. In blood from **allergic** patients, an additional population of effector cells, e.g. basophilic granulocytes is labeled by the **allergen**.

L15 ANSWER 15 OF 86 USPATFULL
ACCESSION NUMBER: 1998:72429 USPATFULL
TITLE: Isolation characterization, and use of the human beta subunit of the high affinity receptor for immunoglobulin E
INVENTOR(S): Kinet, Jean Pierre, Bethesda, MD, United States
PATENT ASSIGNEE(S): The United States of America as represented by the Department of Health and Human Services, Washington, DC, United States (U.S. government)

	NUMBER	DATE
PATENT INFORMATION:	US 5770396	980623
APPLICATION INFO.:	US 92-869933	920416 (7)

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Ulm, John
LEGAL REPRESENTATIVE: Klarquist Sparkman Campbell Leigh & Whinston, LLP
NUMBER OF CLAIMS: 20
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 60 Drawing Figure(s); 52 Drawing Page(s)
LINE COUNT: 2759
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to nucleic acid sequences, encoding amino acid sequences of the .alpha., .beta., and .gamma. subunits of the high affinity receptor for immunoglobulin E, and for amino acid sequences of the subunits. The invention further relates to a method of producing the receptor by expressing cDNA for its .alpha., .beta., and .gamma. subunits in a host cell simultaneously. Aspects of the invention are methods and compositions to **inhibit** the function of the human beta subunit, thereby treating or preventing **allergic** reactions.

L15 ANSWER 16 OF 86 USPATFULL
ACCESSION NUMBER: 1998:68996 USPATFULL
TITLE: Compositions of soluble C-kit ligand and hematopoietic factors
INVENTOR(S): Besmer, Peter, New York, NY, United States
Buck, Jochen, New York, NY, United States
Moore, Malcolm A.S., New York, NY, United States
Nocka, Karl, Harvard, MA, United States
PATENT ASSIGNEE(S): Sloan-Kettering Institute for Cancer Research, New York, NY, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5767074	980616
APPLICATION INFO.:	US 94-341456	941117 (8)

RELATED APPLN. INFO.: Continuation of Ser. No. US 92-873962, filed on 23 Apr 1992, now abandoned which is a continuation-in-part of Ser. No. US 90-594306, filed on 5 Oct 1990 which is a continuation-in-part of Ser. No. US 90-573483, filed on 27 Aug 1990, now abandoned
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Carlson, Karen C.
LEGAL REPRESENTATIVE: White, John P.
NUMBER OF CLAIMS: 18
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 71 Drawing Figure(s); 45 Drawing Page(s)
LINE COUNT: 3560
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A pharmaceutical composition which comprises the c-kit ligand (KL) purified by applicants or produced by applicants' recombinant methods in combination with other hematopoietic factors and a pharmaceutically acceptable carrier is provided as well as methods of treating patients which comprise administering to the patient the pharmaceutical composition of this invention. This invention provides combination therapies using c-kit ligand (KL) and a purified c-kit ligand (KL) polypeptide, or a soluble fragment thereof and other hematopoietic factors. It also provides methods and compositions for ex-vivo use of KL alone or in combination therapy. A mutated KL antagonist is also described. Such an antagonist may also be a small molecule. Antisense nucleic acids to KL as therapeutics are also described. Lastly, compositions and methods are described that take advantage of the role of KL in germ cells, **mast cells** and melanocytes.

L15 ANSWER 17 OF 86 USPATFULL
ACCESSION NUMBER: 1998:68988 USPATFULL
TITLE: Use of interleukin-4 receptors to **inhibit** biological responses mediated by interleukin-4
INVENTOR(S): Mosley, Bruce, Seattle, WA, United States
Cosman, David J., Seattle, WA, United States
Park, Linda, Seattle, WA, United States
Beckmann, M. Patricia, Poulsbo, WA, United States
March, Carl J., Seattle, WA, United States
Idzerda, Rejean, Seattle, WA, United States
PATENT ASSIGNEE(S): Immunex Corporation, Seattle, WA, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5767065	980616
APPLICATION INFO.:	US 95-466324	950606 (8)

RELATED APPLN. INFO.: Division of Ser. No. US 93-94669, filed on 20 Jul 1993, now patented, Pat. No. US 5599905 which is a division of Ser. No. US 90-480694, filed on 14 Feb 1990 which is a continuation-in-part of Ser. No. US 89-370924, filed on 23 Jun 1989, now abandoned which is a continuation-in-part of Ser. No. US 89-326156, filed on 20 Mar 1989, now abandoned which is a continuation-in-part of Ser. No. US 89-319438, filed on 2 Mar 1989, now abandoned which is a continuation-in-part of Ser. No. US 88-265047, filed on 31 Oct 1988, now abandoned
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Draper, Garnette D.
LEGAL REPRESENTATIVE: Anderson, Kathryn A.; Wight, Christopher L.
NUMBER OF CLAIMS: 21
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 37 Drawing Figure(s); 21 Drawing Page(s)
LINE COUNT: 2668
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Mammalian Interleukin-4 receptor proteins find use in **inhibiting** biological activities of IL-4. A method for suppressing an IL-4-dependent immune or inflammatory response in a mammal, including a human, by administering an effective amount of soluble IL-4 receptor (sIL-4R) and a suitable diluent or carrier.

L15 ANSWER 18 OF 86 USPATFULL
ACCESSION NUMBER: 1998:44877 USPATFULL
TITLE: Sequence-directed DNA-binding molecules compositions and methods
INVENTOR(S): Edwards, Cynthia A., Menlo Park, CA, United States
Fry, Kirk E., Palo Alto, CA, United States
Cantor, Charles R., Boston, MA, United States
Andrews, Beth M., Maynard, MA, United States
PATENT ASSIGNEE(S): Genelabs Technologies, Inc., Redwood City, CA, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5744131	980428
APPLICATION INFO.:	US 95-476876	950607 (8)

RELATED APPLN. INFO.: Division of Ser. No. US 92-996783, filed on 23 Dec 1992 which is a continuation-in-part of Ser. No. US 91-723618, filed on 27 Jun 1991, now abandoned
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Zitomer, Stephanie W.
ASSISTANT EXAMINER: Atzel, Amy
LEGAL REPRESENTATIVE: Fabian, Gary R.; Stratford, Carol A.; Dehlinger, Peter J.

NUMBER OF CLAIMS: 3
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 48 Drawing Figure(s); 33 Drawing Page(s)
LINE COUNT: 5113
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention defines an assay useful for screening libraries of synthetic or biological compounds for their ability to bind specific DNA test sequences. The assay is also useful for determining the sequence specificity and relative DNA-binding affinity of DNA-binding molecules for any particular DNA sequence. Also described herein are potential applications of the assay, including: 1) the detection of lead compounds or new drugs via the mass screening of libraries of synthetic or biological compounds (i.e., fermentation broths); 2) the design of sequence-specific DNA-binding drugs comprised of homo- or hetero-meric subunits of molecules for which the sequence specificity was determined using the assay; and 3) the use of molecules for which sequence specificity was determined using the assay as covalently attached moieties to aid in the binding of nucleic acid or other macromolecular polymers to nucleic acid sequences.

L15 ANSWER 19 OF 86 USPATFULL
ACCESSION NUMBER: 1998:39383 USPATFULL
TITLE: Sequence-directed DNA-binding molecules compositions and methods
INVENTOR(S): Edwards, Cynthia A., Menlo Park, CA, United States
Fry, Kirk E., Palo Alto, CA, United States
Cantor, Charles R., Boston, MA, United States
Andrews, Beth M., Maynard, MA, United States
PATENT ASSIGNEE(S): Genelabs Technologies, Inc., Redwood City, CA, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5738990	980414
APPLICATION INFO.:	US 95-475221	950607 (8)

RELATED APPLN. INFO.: Division of Ser. No. US 92-996783, filed on 23 Dec 1992 which is a continuation-in-part of Ser. No. US 91-723618, filed on 27 Jun 1991, now abandoned
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Guzo, David
ASSISTANT EXAMINER: Brusca, John S.
LEGAL REPRESENTATIVE: Fabian, Gary R.; Stratford, Carol A.; Dehlinger, Peter J.
NUMBER OF CLAIMS: 5
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 48 Drawing Figure(s); 33 Drawing Page(s)
LINE COUNT: 5040
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention defines an assay useful for screening libraries of synthetic or biological compounds for their ability to bind specific DNA test sequences. The assay is also useful for determining the sequence specificity and relative DNA-binding affinity of DNA-binding molecules for any particular DNA sequence. Also described herein are potential applications of the assay, including: 1) the detection of lead compounds or new drugs via the mass screening of libraries of synthetic or biological compounds (i.e., fermentation broths); 2) the design of sequence-specific DNA-binding drugs comprised of homo- or hetero-meric subunits of molecules for which the sequence specificity was determined using the assay; and 3) the use of molecules for which sequence specificity was determined using the assay as covalently attached moieties to aid in the binding of nucleic acid or other macromolecular polymers to nucleic acid sequences.

L15 ANSWER 20 OF 86 USPATFULL
ACCESSION NUMBER: 1998:25075 USPATFULL
TITLE: Screening assay for the detection of DNA-binding molecules
INVENTOR(S): Edwards, Cynthia A., Menlo Park, CA, United States
Cantor, Charles R., Boston, MA, United States
Andrews, Beth M., Watertown, MA, United States
Turin, Lisa M., Berkeley, CA, United States
PATENT ASSIGNEE(S): Genelabs Technologies, Inc., Redwood City, CA, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5726014	980310
APPLICATION INFO.:	US 93-123936	930917 (8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 92-996783, filed on 23 Dec 1992 which is a continuation-in-part of Ser. No. US 91-723618, filed on 27 Jun 1991, now abandoned
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Jones, W. Gary
ASSISTANT EXAMINER: Atzel, Amy
LEGAL REPRESENTATIVE: Fabian, Gary R.; Stratford, Carol A.; Dehlinger, Peter J.
NUMBER OF CLAIMS: 19
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 72 Drawing Figure(s); 47 Drawing Page(s)
LINE COUNT: 5659
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention defines a DNA:protein-binding assay useful for screening libraries of synthetic or biological compounds for their ability to bind DNA test sequences. The assay is versatile in that any number of test sequences can be tested by placing the test sequence adjacent to a defined protein binding screening sequence. Binding of molecules to these test sequence changes the binding characteristics of the protein molecule to its cognate binding sequence. When such a molecule binds the test sequence the equilibrium of the DNA:protein complexes is disturbed, generating changes in the concentration of free DNA probe. Numerous exemplary target test sequences (SEQ ID NO:1 to SEQ ID NO:600) are set forth. The assay of the present invention is also useful to characterize the preferred binding sequences of any selected DNA-binding molecule.

L15 ANSWER 21 OF 86 USPATFULL
ACCESSION NUMBER: 1998:14915 USPATFULL
TITLE: **Antibodies** that are immunoreactive with interleukin-4 receptors
INVENTOR(S): Mosley, Bruce, Seattle, WA, United States
Cosman, David J., Seattle, WA, United States
Park, Linda, Seattle, WA, United States
Beckmann, M. Patricia, Poulsbo, WA, United States
March, Carl J., Seattle, WA, United States
Idzerda, Rejean, Seattle, WA, United States
PATENT ASSIGNEE(S): Immunex Corporation, Seattle, WA, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5717072	980210
APPLICATION INFO.:	US 95-465169	950605 (8)

RELATED APPLN. INFO.: Division of Ser. No. US 93-94669, filed on 20 Jul 1993, now patented, Pat. No. US 5599905 which is a division of Ser. No. US 90-480694, filed on 14 Feb 1990 which is a continuation-in-part of Ser. No. US 89-370924, filed on 23 Jun 1989, now abandoned which is a continuation-in-part of Ser. No. US 89-326156, filed on 20 Mar 1989, now abandoned which is a continuation-in-part of Ser. No. US 89-319438, filed on 2 Mar 1989, now abandoned which is a continuation-in-part of Ser. No. US 88-265047, filed on 31 Oct 1988, now abandoned
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Feisee, Lila
ASSISTANT EXAMINER: Reeves, Julie E.
NUMBER OF CLAIMS: 6
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 38 Drawing Figure(s); 22 Drawing Page(s)
LINE COUNT: 2563
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Mammalian **antibodies** that are immunoreactive with interleukin-4 receptor proteins, DNAs and expression vectors encoding mammalian IL-4 receptors, and processes for producing mammalian IL-4 receptors as products of cell culture, as well as antibodies that are immunoreactive with IL-4 receptors. A method for suppressing an IL-4-dependent immune or inflammatory response in a mammal, including a human, involves administering an effective amount of soluble IL-4 receptor (sIL-4R) and a suitable diluent or carrier.

L15 ANSWER 22 OF 86 USPATFULL
ACCESSION NUMBER: 1998:14634 USPATFULL
TITLE: Method of constructing sequence-specific DNA-binding molecules
INVENTOR(S): Edwards, Cynthia A., Menlo Park, CA, United States
Fry, Kirk E., Palo Alto, CA, United States
Cantor, Charles R., Boston, MA, United States
Andrews, Beth M., Watertown, MA, United States
PATENT ASSIGNEE(S): Genelabs Technologies, Inc., Redwood City, CA, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5716780	980210
APPLICATION INFO.:	US 95-484499	950607 (8)

RELATED APPLN. INFO.: Division of Ser. No. US 92-996783, filed on 23 Dec 1992 which is a continuation-in-part of Ser. No. US 91-723618, filed on 27 Jun 1991, now abandoned
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Jones, W. Gary
ASSISTANT EXAMINER: Atzel, Amy
LEGAL REPRESENTATIVE: Fabian, Gary R.; Stratford, Carol A.; Dehlinger, Peter J.
NUMBER OF CLAIMS: 9
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 48 Drawing Figure(s); 33 Drawing Page(s)
LINE COUNT: 4929
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention defines an assay useful for screening libraries of synthetic or biological compounds for their ability to bind specific DNA test sequences. The assay is also useful for determining the sequence specificity and relative DNA-binding affinity of DNA-binding molecules for any particular DNA sequence. Also described herein are potential applications of the assay, including: 1) the detection of lead compounds or new drugs via the mass screening of libraries of synthetic or biological compounds (i.e., fermentation broths); 2) the design of sequence-specific DNA-binding drugs comprised of homo- or hetero-meric subunits of molecules for which the sequence specificity was determined using the assay; and 3) the use of molecules for which sequence specificity was determined using the assay as covalently attached moieties to aid in the binding of nucleic acid or other macromolecular polymers to nucleic acid sequences.

L15 ANSWER 23 OF 86 USPATFULL
ACCESSION NUMBER: 1998:11885 USPATFULL
TITLE: Methods for diagnosis of **allergy**
INVENTOR(S): Wai Fei, David Tai, Belmont, CA, United States
Lowe, John, Daly City, CA, United States
Jardieu, Paula, San Francisco, CA, United States
PATENT ASSIGNEE(S): Genentech, Inc., South San Francisco, CA, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5714338	980203
	WO 9516203	950615
APPLICATION INFO.:	US 95-393014	950227 (8)
	WO 94-US14282941209	
		950227 PCT 371 date
		950227 PCT 102(e) date

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 93-165436, filed on 10 Dec 1993, now abandoned
DOCUMENT TYPE: Utility

PRIMARY EXAMINER: Chan, Christina Y.
ASSISTANT EXAMINER: VanderVegt, F. Pierre
LEGAL REPRESENTATIVE: Love, Richard B.
NUMBER OF CLAIMS: 15
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 20 Drawing Figure(s); 11 Drawing Page(s)
LINE COUNT: 2478
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Provided are methods for the diagnosis of **allergic** disease wherein IgE specific for an **allergen** of interest is detected in a patient serum sample by using the patient serum sample to sensitize in the presence or absence of an IgE antagonist a **mast cell** or **basophil** host genetically engineered to display surface expression of a **Fc.epsilon**.RI subunit that is capable of mediating the host cells release of a pharmacological mediator upon induction with patient serum and **allergen**, challenging the sensitized host cells with the **allergen** of interest, and determining the presence or absence of IgE specific to the **allergen** of interest in the patient serum sample by comparing the release of the pharmacological mediator produced by host cells sensitized with patient serum in the presence of the IgE antagonist to the release of the pharmacological mediator produced by host cells sensitized with patient serum in the absence of the IgE antagonist.

L15 ANSWER 24 OF 86 USPATFULL
ACCESSION NUMBER: 1998:9325 USPATFULL
TITLE: Methods for detecting modulators of cytokine action
INVENTOR(S): Seidel, H. Martin, San Diego, CA, United States
Lamb, I. Peter, San Diego, CA, United States
Chan, Shin-Shay Tian, San Diego, CA, United States
PATENT ASSIGNEE(S): Ligand Pharmaceuticals, Inc., San Diego, CA, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5712094	980127
APPLICATION INFO.:	US 95-411020	950327 (8)

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Ulm, John
ASSISTANT EXAMINER: Mertz, Prema
LEGAL REPRESENTATIVE: Elmer, J. Scott
NUMBER OF CLAIMS: 4
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 2 Drawing Figure(s); 1 Drawing Page(s)
LINE COUNT: 1887
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides DNA constructs that contain oligonucleotide sequences comprising DNA regulatory elements of the general sequence TTN.sub.x AA that bind activated transcriptional regulatory proteins in response to signaling molecules, such as cytokines, an operably linked promoter and operably linked heterologous gene. The present invention also provides host cells transfected with such DNA constructs, as well as methods for measuring the ability of compounds to act as agonists and antagonists of gene transcription utilizing these DNA constructs and transfected host cells.

L15 ANSWER 25 OF 86 USPATFULL
ACCESSION NUMBER: 1998:7181 USPATFULL
TITLE: Nucleic acid encoding an interleukin 4 signal transducer
INVENTOR(S): McKnight, Steven L., South San Francisco, CA, United States
Hou, Jinzhao, South San Francisco, CA, United States
PATENT ASSIGNEE(S): Tularik Inc., South San Francisco, CA, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5710266	980120
APPLICATION INFO.:	US 97-781890	970105 (8)

RELATED APPLN. INFO.: Division of Ser. No. US 94-276099, filed on 15 Jul 1994, now patented, Pat. No. US 5591825 which is a continuation-in-part of Ser. No. US 94-269604, filed on 5 Jul 1994, now abandoned
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Ulm, John
ASSISTANT EXAMINER: Mertz, Prema
LEGAL REPRESENTATIVE: Osman, Richard Aron
NUMBER OF CLAIMS: 3
EXEMPLARY CLAIM: 1
LINE COUNT: 1453
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention provides methods and compositions for identifying pharmacological agents useful in the diagnosis or treatment of disease associated with the expression of a gene modulated by an interleukin 4 signal transducer and activator of transcription, IL-4 Stat. IL-4 Stat peptides and IL-4 receptor peptides and nucleic acids encoding such peptides find therapeutic uses. The subject compositions include IL-4 Stat and IL-4 receptor proteins, portions thereof, nucleic acids encoding them, and specific **antibodies**. The disclosed pharmaceutical screening methods are particularly suited to high-throughput screening where one or more steps are performed by a computer controlled electromechanical robot comprising an axial rotatable arm.

L15 ANSWER 26 OF 86 USPATFULL
ACCESSION NUMBER: 97:112584 USPATFULL
TITLE: Immunoglobulin E **competitor**
INVENTOR(S): Gould, Hannah Jane, London, England
Helm, Birgit Anna, Loughton, England
Marsh, Philip John Henry Benedict, London, England
PATENT ASSIGNEE(S): 501 Research Corporation Limited, London, United Kingdom (non-U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5693758	971202
APPLICATION INFO.:	US 95-454605	950531 (8)

RELATED APPLN. INFO.: Continuation of Ser. No. US 92-993970, filed on 17 Dec 1992, now abandoned which is a continuation of Ser. No. US 89-392528, filed on 7 Aug 1989, now abandoned

	NUMBER	DATE
PRIORITY INFORMATION:	GB 87-27045	871119

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Feisee, Lila
ASSISTANT EXAMINER: Johnson, Nancy A.
LEGAL REPRESENTATIVE: Nixon & Vanderhye P.C.
NUMBER OF CLAIMS: 3
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 4 Drawing Figure(s); 3 Drawing Page(s)
LINE COUNT: 763
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A polypeptide **competitor** or analogue for human Immunoglobulin E (IgE) low affinity sites comprises a polypeptide which has a sequence of amino acid which has a sequence of amino acids which is shown in Table I. This amino acid sequence corresponds to amino acids 340 to 439 of the epsilon heavy chain of IgE. A particularly preferred polypeptide **competitor** has a sequence of amino acids corresponding to amino acids 340 to 547 of the epsilon heavy chain of IgE as set out in Table V herein, which also shows the corresponding DNA sequence coding therefor. Such a polypeptide may also include additional short sequences at the beginning and/or end of the core sequence which are physiologically harmless and do not contribute to the ability of the core sequence to **compete** with native IgE for the low affinity receptor sites on human cells. The polypeptide may be produced synthetically or by expression from Escherichia coli containing a plasmid having a DNA segment coding for the polypeptide.

L15 ANSWER 27 OF 86 USPATFULL
ACCESSION NUMBER: 97:112300 USPATFULL
TITLE: Method of ordering sequence binding preferences of a DNA-binding molecule
INVENTOR(S): Edwards, Cynthia A., Menlo Park, CA, United States
Fry, Kirk E., Palo Alto, CA, United States
Cantor, Charles R., Boston, MA, United States
Andrews, Beth M., Maynard, MA, United States(4)
PATENT ASSIGNEE(S): Genelabs Technologies, Inc., Redwood City, CA, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5693463	971202
APPLICATION INFO.:	US 92-996783	921223 (7)

DISCLAIMER DATE: 20110426
RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 91-723618, filed on 27 Jun 1991, now abandoned
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Zitomer, Stephanie W.
ASSISTANT EXAMINER: Atzel, Amy
LEGAL REPRESENTATIVE: Fabian, Gary R.; Stratford, Carol A.; Dehlinger, Peter J.
NUMBER OF CLAIMS: 3
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 48 Drawing Figure(s); 33 Drawing Page(s)
LINE COUNT: 4908
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention defines an assay useful for screening libraries of synthetic or biological compounds for their ability to bind specific DNA test sequences. The assay is also useful for determining the sequence specificity and relative DNA-binding affinity of DNA-binding molecules for any particular DNA sequence. Also described herein are potential applications of the assay, including: 1) the detection of lead compounds or new drugs via the mass screening of libraries of synthetic or biological compounds (i.e., fermentation broths); 2) the design of sequence-specific DNA-binding drugs comprised of homo- or hetero-meric subunits of molecules for which the sequence specificity was determined using the assay; and 3) the use of molecules for which sequence specificity was determined using the assay as covalently attached moieties to aid in the binding of nucleic acid or other macromolecular polymers to nucleic acid sequences.

L15 ANSWER 28 OF 86 USPATFULL
ACCESSION NUMBER: 97:104615 USPATFULL
TITLE: High-affinity oligonucleotide ligands to immunoglobulin E (IgE)
INVENTOR(S): Wiegand, Torsten Walter, Boulder, CO, United States
Tasset, Diane, Boulder, CO, United States
Gold, Larry, Boulder, CO, United States
PATENT ASSIGNEE(S): NeXstar Pharmaceuticals, Inc., Boulder, CO, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5686592	971111
APPLICATION INFO.:	US 95-471985	950606 (8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 91-714131, filed on 10 Jun 1991, now patented, Pat. No. US 5475096 which is a continuation-in-part of Ser. No. US 90-536428, filed on 11 Jun 1990, now abandoned And Ser. No. US 92-964624, filed on 21 Oct 1992, now patented, Pat. No. US 5496938 And Ser. No. US 94-317403, filed on 3 Oct 1994
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Zitomer, Stephanie W.
LEGAL REPRESENTATIVE: Swanson & Bratschun LLC
NUMBER OF CLAIMS: 7
EXEMPLARY CLAIM: 1
LINE COUNT: 1740
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB This invention discloses high-affinity oligonucleotide ligands to

human Immunoglobulin E (IgE), specifically RNA and ssDNA ligands having the ability to bind to IgE, and the methods for obtaining such ligands. The ligands are capable of **inhibiting** the interaction of IgE with its receptor.

L15 ANSWER 29 OF 86 USPATFULL
ACCESSION NUMBER: 97:86732 USPATFULL
TITLE: **Allergen**-specific human IgA **monoclonal antibodies** for mucosal administration
INVENTOR(S): Chang, Tse Wen, Houston, TX, United States
PATENT ASSIGNEE(S): Tanox Biosystems, Inc., Houston, TX, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5670626	970923
APPLICATION INFO.:	US 94-263258	940621 (8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 92-994126, filed on 21 Dec 1992, now abandoned
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Scheiner, Toni R.
LEGAL REPRESENTATIVE: Mirabel, Eric P.
NUMBER OF CLAIMS: 2
EXEMPLARY CLAIM: 1,2
LINE COUNT: 765
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Disclosed are pharmaceutical preparations containing human **monoclonal** IgA **antibodies** specific for major **allergenic** proteins found in ragweed, house dust mites, and cat and dog dander. Also disclosed are constructs comprising physiological compatible polymer backbones or microbeads and a plurality of covalently conjugated **allergen**-specific binding molecules. Such binding molecules are IgG or IgA, or their F(ab').sub.2, Fab, or Fv fragments, specific to the major **allergenic** proteins mentioned above. Also disclosed are methods for treating a patient with **allergic** rhinitis, asthma, or conjunctivitis by applying a pharmaceutical preparation containing the **antibodies** specific for the **allergenic** molecules, to which the patient is sensitized, to the patient's affected mucosal tissues, such as the nasal linings, the respiratory tract, or the eyes.

L15 ANSWER 30 OF 86 USPATFULL
ACCESSION NUMBER: 97:73454 USPATFULL
TITLE: Methods of identifying patients having an altered immune status
INVENTOR(S): Ochoa, Augusto C., Frederick, MD, United States
Young, Howard A., Gaithersburg, MD, United States
Longo, Dan L., Kensington, MD, United States
Ghosh, Paritosh, Frederick, MD, United States
Robb, Richard, Princeton Junction, NJ, United States
Neville, Mary, Jamesburg, NJ, United States
PATENT ASSIGNEE(S): The United States of America as represented by the Department of Health and Human Services, Washington, DC, United States (U.S. government)
Biomira USA Inc., Cranbury, NJ, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5658744	970819
APPLICATION INFO.:	US 94-277299	940722 (8)

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Saunders, David
LEGAL REPRESENTATIVE: Foley & Lardner
NUMBER OF CLAIMS: 2
EXEMPLARY CLAIM: 1
LINE COUNT: 1803
AB Methods of identifying a patient having an altered immune status involve determining an immune status index for the patient and comparing it to the immune status index in healthy individuals. In general, an immune status index is the ratio of the amount of a protein that varies significantly in a patient with an altered immune status to the amount of another protein that is substantially invariant in both healthy and immune-altered individuals. Variable proteins can be TCR subunit proteins, T lymphocyte signal transduction pathway proteins, polynucleotide binding proteins or biological response modifiers (BRM). In addition, the ratio of a TH-1-type BRM to a TH-2-type BRM, the ratio of cytoplasmic to nuclear levels of polynucleotide binding proteins, the pattern of protein binding to an oligonucleotide probe that comprises the protein binding region of a gene for a BRM, or the pattern of distribution of T lymphocytes in a density gradient following density gradient centrifugation are also suitable as an immune status index. The methods are useful in identifying patients exhibiting immunosuppression, hyperimmunity and autoimmunity, as well as in assessing the immune status of a patient undergoing organ transplant.

L15 ANSWER 31 OF 86 USPATFULL
ACCESSION NUMBER: 97:70719 USPATFULL
TITLE: Method of treatment of parasitic infection using IgE antagonists
INVENTOR(S): Amiri, Payman, San Francisco, CA, United States
Haak-Frendscho, Mary, Fitchburg, WI, United States
Jardieu, Paula M., Berkeley, CA, United States
PATENT ASSIGNEE(S): Genentech, Inc., South San Francisco, CA, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5656273	970812
APPLICATION INFO.:	US 95-422748	950414 (8)

RELATED APPLN. INFO.: Continuation of Ser. No. US 94-184083, filed on 18 Jan 1994, now abandoned
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Scheiner, Toni R.
LEGAL REPRESENTATIVE: Fitts, Renee A.; Teskin, Robin L.; Svoboda, Craig G.
NUMBER OF CLAIMS: 29
EXEMPLARY CLAIM: 28
NUMBER OF DRAWINGS: 9 Drawing Figure(s); 5 Drawing Page(s)
LINE COUNT: 858
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB This invention concerns a method for the prevention and treatment of parasitic infection by administering an IgE antagonists. The invention further concerns pharmaceutical compositions and bispecific molecules useful in such method.

L15 ANSWER 32 OF 86 USPATFULL
ACCESSION NUMBER: 97:70713 USPATFULL
TITLE: Method of using interleukin-4
INVENTOR(S): Lee, Frank, Palo Alto, CA, United States
Yokota, Takashi, Palo Alto, CA, United States
Arai, Ken-ichi, Palo Alto, CA, United States
Mosmann, Timothy, Atherton, CA, United States
Rennick, Donna, Los Altos, CA, United States
PATENT ASSIGNEE(S): Schering Corporation, Kenilworth, NJ, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5656266	970812
APPLICATION INFO.:	US 95-468734	950606 (8)

RELATED APPLN. INFO.: Division of Ser. No. US 94-221551, filed on 1 Apr 1994, now abandoned which is a continuation of Ser. No. US 93-27601, filed on 5 Mar 1993, now abandoned which is a continuation of Ser. No. US 92-854771, filed on 20 Mar 1992, now abandoned which is a continuation of Ser. No. US 90-615902, filed on 20 Nov 1990, now abandoned which is a division of Ser. No. US 86-908215, filed on 17 Sep 1986, now patented, Pat. No. US 5017691 which is a continuation-in-part of Ser. No. US 86-881553, filed on 3 Jul 1986, now abandoned which is a continuation-in-part of Ser. No. US 86-843958, filed on 25 Mar 1986, now patented, Pat. No. US 5552304 which is a continuation-in-part of Ser. No. US 85-799668, filed on 19 Nov 1985, now abandoned
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Jagannathan, Vasu S.
ASSISTANT EXAMINER: Kemmerer, Elizabeth C.
LEGAL REPRESENTATIVE: Lunn, Paul G.; Foulke, Cynthia L.; Gould, James M.
NUMBER OF CLAIMS: 1
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 33 Drawing Figure(s); 24 Drawing Page(s)
LINE COUNT: 2854
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Mammalian proteins and muteins thereof, designated interleukin-4s (IL-4s), are provided which exhibit both B cell growth factor activity and T cell growth factor activity. Compounds of the invention include native human and murine IL-4s, muteins thereof, and nucleic acids which are effectively homologous to disclosed cDNAs, and/or which are capable of coding for mammalian IL-4s and their muteins.

L15 ANSWER 33 OF 86 USPATFULL
ACCESSION NUMBER: 97:68158 USPATFULL
TITLE: Vaccine comprising part of constant region of IgE for treatment of IgE-mediated **allergic** reactions
INVENTOR(S): Hellman, Lars T., Vaderkvarnsgatan 11A, S-753 29 Uppsala, Sweden

	NUMBER	DATE
PATENT INFORMATION:	US 5653980	970805
	WO 9305810	930401
APPLICATION INFO.:	US 94-196227	940323 (8)
	WO 92-SE673	920925
		940323 PCT 371 date
		940323 PCT 102(e) date

	NUMBER	DATE
PRIORITY INFORMATION:	SE 91-2808	910926

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Feisee, Lila
ASSISTANT EXAMINER: Lucas, John
LEGAL REPRESENTATIVE: Bacon & Thomas
NUMBER OF CLAIMS: 9
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 3 Drawing Figure(s); 3 Drawing Page(s)
LINE COUNT: 818
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention relates to a vaccine, preferably for human use, against IgE-mediated **allergic** reactions. The vaccine contains a protein having the entire amino acid sequence of the constant CH2-CH3 domains of the epsilon chain of the IgE molecule or a structurally stable unit of said amino acid sequence, the protein optionally being coupled to one or more heterologous carrier proteins, and optionally containing an adjuvant. The vaccine is injected, with or without adjuvant, to raise the concentration of endogenous anti-IgE **antibodies** in the plasma of **allergy** subjects. In practice, the vaccine can be used against all types of IgE-mediated **allergies** since the **antibodies** are not dependent of the antigen specificity of the IgE molecule but will **reduce** the total IgE pool of the subject. Therefore, the vaccine is aimed at being used for treatment of subjects having different types of IgE-mediated **allergies**. The increased concentrations of anti-IgE **antibodies reduces** the free pool of antigen-specific IgE, which thereby strongly **reduces** the risk for an **allergen**-mediated release of the physiologically highly active substances which are stored or produced in connection with granula release from **mast cells** and basophilic leucocytes.

L15 ANSWER 34 OF 86 USPATFULL

ACCESSION NUMBER: 97:61687 USPATFULL
TITLE: Method of treatment of endogenous, painful gastrointestinal conditions of non-inflammatory, non-ulcerative origin
INVENTOR(S): Theoharides, Theoharis C., Brookline, MA, United States
PATENT ASSIGNEE(S): KOS Pharmaceutical, Inc., Miami, FL, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5648355	970715
APPLICATION INFO.:	US 94-193597	940209 (8)

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Weddington, Kevin E.
NUMBER OF CLAIMS: 21
EXEMPLARY CLAIM: 1
LINE COUNT: 785
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A method for treating endogenous, painful gastrointestinal conditions of non-inflammatory, non-ulcerative origin, such as abdominal migraine and irritable bowel syndrome, entails administering a pharmacologically effective amount of a mast cell degranulation-blocking agent.

L15 ANSWER 35 OF 86 USPATFULL
ACCESSION NUMBER: 97:49515 USPATFULL
TITLE: Method to detect protein-protein interactions
INVENTOR(S): Dalton, Stephen, Bloomfield, NJ, United States
Kochan, Jarema P., Verona, NJ, United States
Osborne, Mark A., South Brunswick, NJ, United States
PATENT ASSIGNEE(S): Hoffmann-La Roche Inc., Nutley, NJ, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5637463	970610
APPLICATION INFO.:	US 95-434730	950504 (8)

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Ketter, James
ASSISTANT EXAMINER: Brusca, John S.
LEGAL REPRESENTATIVE: Johnston, George W.; Rocha-Tramaloni, Patricia S.; Semionow, Raina
NUMBER OF CLAIMS: 20
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 11 Drawing Figure(s); 10 Drawing Page(s)
LINE COUNT: 1264
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Methods are provided for studying protein-protein interactions which require posttranslational modification of one of the proteins. The interaction is detected by reconstituting the activity of a transcriptional activator. This activity is dependent on the interactions between three different proteins. These include two chimeric proteins, one of which must be posttranslationally modified by the activity of the third protein in order for the chimeric proteins to interact. One of the chimeric proteins contains a transcriptional activation domain fused to a test protein. The second chimeric protein contains a DNA-binding domain of a transcriptional activator fused to the other test protein.

L15 ANSWER 36 OF 86 USPATFULL
ACCESSION NUMBER: 97:40892 USPATFULL
TITLE: DNA encoding canine immunoglobulin E
INVENTOR(S): Hollis, Gregory F., Westfield, NJ, United States
Patel, Mayur D., Edison, NJ, United States
PATENT ASSIGNEE(S): Merck & Co., Inc., Rahway, NJ, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5629415	970513
APPLICATION INFO.:	US 94-336583	941109 (8)

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Scheiner, Toni R.
LEGAL REPRESENTATIVE: Carty, Christine E.; Tribble, Jack L.
NUMBER OF CLAIMS: 4
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 5 Drawing Figure(s); 5 Drawing Page(s)
LINE COUNT: 913
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to DNA molecules encoding a canine IgE and species-specific regions of the canine IgE constant region. The invention comprises the DNA molecules, proteins encoded by the DNA molecules, **antibodies** to the proteins, cells transformed by the DNA molecules, assays employing the transformed cells, compounds identified by the assays and kits containing the DNA molecules or derivatives thereof.

L15 ANSWER 37 OF 86 USPATFULL
ACCESSION NUMBER: 97:40635 USPATFULL
TITLE: High-affinity oligonucleotide ligands to immunoglobulin E (IgE)
INVENTOR(S): Wiegand, Torsten W., Boulder, CO, United States
Tasset, Diane, Boulder, CO, United States
Gold, Larry, Boulder, CO, United States
PATENT ASSIGNEE(S): NeXstar Pharmaceuticals, Inc., Boulder, CO, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5629155	970513
APPLICATION INFO.:	US 94-317403	941003 (8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 91-714131, filed on 10 Jun 1991, now patented, Pat. No. US 5475096 which is a continuation-in-part of Ser. No. US 90-536428, filed on 11 Jun 1990, now abandoned And a continuation-in-part of Ser. No. US 92-964624, filed on 21 Oct 1992, now patented, Pat. No. US 5496938
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Zitomer, Stephanie W.
LEGAL REPRESENTATIVE: Swanson & Bratschun, L.L.C.
NUMBER OF CLAIMS: 5
EXEMPLARY CLAIM: 1
LINE COUNT: 1019
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB This invention discloses high-affinity oligonucleotide ligands to human Immunoglobulin E (IgE), specifically RNA ligands having the ability to bind to IgE, and the methods for obtaining such ligands. The ligands are capable of **inhibiting** the interaction of IgE with its receptor.

L15 ANSWER 38 OF 86 USPATFULL
ACCESSION NUMBER: 97:36299 USPATFULL
TITLE: Anti-human IgE **monoclonal antibodies**
INVENTOR(S): Washida, Naohiro, Tochigi, Japan
Yoshida, Toshiko, Tochigi, Japan
PATENT ASSIGNEE(S): Snow Brand Milk Products Co., Ltd., Hokkaido, Japan (non-U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5625039	970429
APPLICATION INFO.:	US 94-336569	941109 (8)

RELATED APPLN. INFO.: Continuation of Ser. No. US 92-994503, filed on 21 Dec 1992, now abandoned

	NUMBER	DATE
PRIORITY INFORMATION:	JP 91-357005	911224

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Scheiner, Toni R.
LEGAL REPRESENTATIVE: Burgess, Ryan & Wayne
NUMBER OF CLAIMS: 1
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 7 Drawing Figure(s); 7 Drawing Page(s)
LINE COUNT: 634
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB **Monoclonal antibodies** are provided which specifically bind to human immunoglobulin e (IgE) and has a molecular weight of approximately 150,000 determined by SDS-polyacrylamide gel electrophoresis (non-**reduced** state), the ability to bind to human IgE-producing B cells, the ability to recognize IgE bound to human or canine cell having **Fc.epsilon**. receptor and further characterized by specific sequences.

L15 ANSWER 39 OF 86 USPATFULL
ACCESSION NUMBER: 97:33851 USPATFULL
TITLE: CDS derivatives and methods of use for cellular modulation and enhancement of cellular engraftment
INVENTOR(S): Tykocinski, Mark L., Shaker Heights, OH, United States
Kaplan, David R., Cleveland Heights, OH, United States
PATENT ASSIGNEE(S): TKB Associates Limited Partnership, Pepper Pike, OH, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5623056	970422
APPLICATION INFO.:	US 93-174583	931228 (8)

RELATED APPLN. INFO.: Continuation of Ser. No. US 89-429401, filed on 31 Oct 1989 which is a continuation-in-part of Ser. No. US 89-323770, filed on 15 Mar 1989, now abandoned
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Cunningham, Thomas M.
LEGAL REPRESENTATIVE: Lyon & Lyon
NUMBER OF CLAIMS: 25
EXEMPLARY CLAIM: 1
LINE COUNT: 1134
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Specific and nonspecific immunomodulation, enhancement of cellular engraftment, and modulation of nonimmune cells are achieved by using various membrane-binding and soluble CD8 compositions.

L15 ANSWER 40 OF 86 USPATFULL
ACCESSION NUMBER: 97:25123 USPATFULL
TITLE: Humanized **monoclonal antibodies** binding to IgE-bearing B cells but not **basophils**
INVENTOR(S): Chang, Tse W., Houston, TX, United States
PATENT ASSIGNEE(S): Tanox Biosystems, Inc., Houston, TX, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5614611	970325
APPLICATION INFO.:	US 94-328842	941025 (8)

RELATED APPLN. INFO.: Continuation of Ser. No. US 89-357483, filed on 26 May 1989, now patented, Pat. No. US 5420251 which is a continuation-in-part of Ser. No. US 88-291068, filed on 28 Dec 1988, now abandoned which is a continuation-in-part of Ser. No. US 88-226421, filed on 29 Jul 1988, now patented, Pat. No. US 5422258 which is a continuation-in-part of Ser. No. US 87-140036, filed on 31 Dec 1987, now abandoned
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Caputa, Anthony C.
LEGAL REPRESENTATIVE: Mirabel, Eric P.
NUMBER OF CLAIMS: 7
EXEMPLARY CLAIM: 1
LINE COUNT: 1390
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Unique antigenic epitopes of IgE (designated ige.bl) which are present on IgE-bearing B lymphocytes but not **basophils** are described. **Monoclonal antibodies** which bind to the epitopes are useful to treat IgE-mediated **allergy**. The **monoclonal antibodies**,

either alone or as cytotoxin-conjugated immunotoxins, can be used to reduce or deplete IgE-producing B cells in allergy sufferers. The antibodies may also have the additional therapeutical effects of clearing IgE from circulation by forming immune complexes. Monoclonal antibodies against the paratope of the antibody can be used to actively immunize allergy sufferers to attain the same results of administering the monoclonal antibody.

L15 ANSWER 41 OF 86 USPATFULL
ACCESSION NUMBER: 97:12178 USPATFULL
TITLE: CD8 derivatives and methods of use for cellular modulation and enhancement of cellular engraftment
INVENTOR(S): Tykocinski, Mark L., Shaker Heights, OH, United States
Kaplan, David R., Cleveland Heights, OH, United States
PATENT ASSIGNEE(S): TKB Associates Limited Partnership, Pepper Pike, OH, United States (U.S. corporation)

NUMBER	DATE
PATENT INFORMATION:	US 5601828 970211
APPLICATION INFO.:	US 93-112005 930824 (8)

RELATED APPLN. INFO.: Continuation of Ser. No. US 91-691475, filed on 25 Apr 1991, now patented, Pat. No. US 5242687 which is a continuation-in-part of Ser. No. US 89-323770, filed on 15 Mar 1989, now abandoned
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Cunningham, Thomas M.
LEGAL REPRESENTATIVE: Lyon & Lyon
NUMBER OF CLAIMS: 26
EXEMPLARY CLAIM: 1
LINE COUNT: 1211
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Specific and nonspecific immunomodulation, enhancement of cellular engraftment, and modulation of nonimmune cells are achieved by using various membrane-binding and soluble CD8 compositions.

L15 ANSWER 42 OF 86 USPATFULL
ACCESSION NUMBER: 97:10129 USPATFULL
TITLE: Compounds and methods for suppressing an immune response to sulfomethoxozale containing substances
INVENTOR(S): Rodell, Timothy C., Denver, CO, United States
De La Cruz, Vidal, Westminster, CO, United States
McCall, Catherine, Boulder, CO, United States
Blodgett, James K., Westminster, CO, United States
McLeod, Donald A., Westminster, CO, United States
PATENT ASSIGNEE(S): Coretech, Inc., Denver, CO, United States (U.S. corporation)

NUMBER	DATE
PATENT INFORMATION:	US 5599912 970204
APPLICATION INFO.:	US 93-118819 930910 (8)

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Higel, Floyd D.
LEGAL REPRESENTATIVE: Schwegman, Lundberg, Woessner & Kluth, P.A.
NUMBER OF CLAIMS: 7
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 15 Drawing Figure(s); 13 Drawing Page(s)
LINE COUNT: 1713
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides methods of detecting and suppressing an undesired immune response, and agents suitable for use therein. More specifically, the present invention, provides agents and methods for their use, directed at detecting and suppressing an undesired immune response to compositions containing sulfamethoxazole.

L15 ANSWER 43 OF 86 USPATFULL
ACCESSION NUMBER: 97:10123 USPATFULL
TITLE: Interleukin-4 receptors
INVENTOR(S): Mosley, Bruce, Seattle, WA, United States
Cosman, David J., Seattle, WA, United States
Park, Linda, Seattle, WA, United States
Beckmann, M. Patricia, Poulsbo, WA, United States
March, Carl J., Seattle, WA, United States
Idzerda, Rejean, Seattle, WA, United States
PATENT ASSIGNEE(S): Immunex Corporation, Seattle, WA, United States (U.S. corporation)

NUMBER	DATE
PATENT INFORMATION:	US 5599905 970204
APPLICATION INFO.:	US 93-94669 930720 (8)

RELATED APPLN. INFO.: Division of Ser. No. US 90-480694, filed on 14 Feb 1990 which is a continuation-in-part of Ser. No. US 89-370924, filed on 23 Jun 1989, now abandoned which is a continuation-in-part of Ser. No. US 89-326156, filed on 20 Mar 1989, now abandoned which is a continuation-in-part of Ser. No. US 89-319438, filed on 2 Mar 1989, now abandoned which is a continuation-in-part of Ser. No. US 88-265047, filed on 19 Oct 1988, now abandoned
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Walsh, Stephen G.
ASSISTANT EXAMINER: Ulm, John D.
NUMBER OF CLAIMS: 21
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 38 Drawing Figure(s); 22 Drawing Page(s)
LINE COUNT: 2652
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Mammalian Interleukin-4 receptor proteins, DNAs and expression vectors encoding mammalian IL-4 receptors, and processes for producing mammalian IL-4 receptors as products of cell culture, are disclosed. A method for suppressing an IL-4-dependent immune or inflammatory response in a mammal, including a human, by administering an effective amount of soluble IL-4 receptor (sIL-4R) and a suitable diluent or carrier.

L15 ANSWER 44 OF 86 USPATFULL
ACCESSION NUMBER: 97:6049 USPATFULL
TITLE: Method of refolding human IL-13
INVENTOR(S): Culpepper, Janice, Mountain View, CA, United States
McKenzie, Andrew, Redwood City, CA, United States
Dang, Warren, San Jose, CA, United States
Zurawski, Gerard, Redwood City, CA, United States
PATENT ASSIGNEE(S): Schering Corporation, Kenilworth, NJ, United States (U.S. corporation)

NUMBER	DATE
PATENT INFORMATION:	US 5596072 970121
APPLICATION INFO.:	US 93-12543 930201 (8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 92-933416, filed on 21 Aug 1992, now abandoned
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Draper, Garnette D.
ASSISTANT EXAMINER: Spector, Lorraine M.
LEGAL REPRESENTATIVE: Ching, Edwin P.
NUMBER OF CLAIMS: 10
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 288 Drawing Figure(s); 61 Drawing Page(s)
LINE COUNT: 4619
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Nucleic acids encoding human IL-13, and purified IL-13 proteins and fragments thereof. Antibodies, both polyclonal and monoclonal, are also provided. Methods of using the compositions for both diagnostic and therapeutic utilities are provided.

L15 ANSWER 45 OF 86 USPATFULL
ACCESSION NUMBER: 97:1544 USPATFULL
TITLE: Interleukin 4 signal transducers
INVENTOR(S): McKnight, Steven L., South San Francisco, CA, United States
Hou, Jinzhao, South San Francisco, CA, United States
PATENT ASSIGNEE(S): Tularik, Inc., So. San Francisco, CA, United States (U.S. corporation)

NUMBER	DATE
PATENT INFORMATION:	US 5591825 970107
APPLICATION INFO.:	US 94-276099 940715 (8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 94-269604, filed on 5 Jul 1994, now abandoned
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Ulm, John
ASSISTANT EXAMINER: Mertz, Prema
LEGAL REPRESENTATIVE: Flehr, Hohbach, Test, Albritton & Herbert
NUMBER OF CLAIMS: 3
EXEMPLARY CLAIM: 1
LINE COUNT: 1813
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention provides methods and compositions for identifying pharmacological agents useful in the diagnosis or treatment of disease associated with the expression of a gene modulated by an interleukin 4 signal transducer and activator of transcription, IL-4 Stat. IL-4 Stat peptides and IL-4 receptor peptides and nucleic acids encoding such peptides find therapeutic uses. The subject compositions include IL-4 Stat and IL-4 receptor proteins, portions thereof, nucleic acids encoding them, and specific antibodies. The disclosed pharmaceutical screening methods are particularly suited to high-throughput screening where one or more steps are performed by a computer controlled electromechanical robot comprising an axial rotatable arm.

L15 ANSWER 46 OF 86 USPATFULL
ACCESSION NUMBER: 97:1542 USPATFULL
TITLE: Expression of specific immunogens using viral antigens
INVENTOR(S): Hung, Paul P., Bryn Mawr, PA, United States
Lee, Shaw-Guang L., Villanova, PA, United States
Kalyan, Narender K., Wayne, PA, United States
PATENT ASSIGNEE(S): American Home Products Corporation, Madison, NJ, United States (U.S. corporation)

NUMBER	DATE
PATENT INFORMATION:	US 5591823 970107
APPLICATION INFO.:	US 93-169813 931217 (8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 91-805105, filed on 11 Dec 1991, now abandoned
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Smith, Lynette F.
LEGAL REPRESENTATIVE: Jackson, Richard K.
NUMBER OF CLAIMS: 9
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 2 Drawing Figure(s); 2 Drawing Page(s)
LINE COUNT: 1122
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Chimeric DNA fragments are provided which include a nucleotide sequence substantially the same as that which codes for the HA surface protein of an influenza A virus having five immunodominant antigenic sites, wherein a nucleotide sequence substantially the same as that which codes for a foreign epitope is inserted into the nucleotide sequence of an antigenic site. Corresponding chimeric peptides, expression vectors, and transformed hosts are provided as well. These peptides are useful in providing vaccines against the respective antigens and in test kits to detect the exposure to such antigens. Additionally, these peptides or their corresponding antibodies are useful in methods of treatment and prevention of the manifestations of exposure to these antigens, including immunotherapy.

L15 ANSWER 47 OF 86 USPATFULL
ACCESSION NUMBER: 96:108816 USPATFULL

TITLE: Sequence-directed DNA-binding molecules compositions and methods
INVENTOR(S): Edwards, Cynthia A., Menlo Park, CA, United States
Cantor, Charles R., Boston, MA, United States
Andrews, Beth M., Maynard, MA, United States
Turin, Lisa M., Redwood City, CA, United States
Fry, Kirk E., Palo Alto, CA, United States
PATENT ASSIGNEE(S): Genelabs Technologies, Inc., Redwood City, CA, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5578444	961126
APPLICATION INFO.:	US 93-171389	931220 (8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 93-123936, filed on 17 Sep 1993 which is a continuation-in-part of Ser. No. US 92-996783, filed on 23 Dec 1992 which is a continuation-in-part of Ser. No. US 91-723618, filed on 27 Jun 1991, now abandoned
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Zitomer, Stephanie W.
ASSISTANT EXAMINER: Atzel, Amy
LEGAL REPRESENTATIVE: Fabian, Gary R.; Brookes, Allen A.; Stratford, Carol A.
NUMBER OF CLAIMS: 15
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 71 Drawing Figure(s); 48 Drawing Page(s)
LINE COUNT: 5845
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention defines a DNA:protein-binding assay useful for screening libraries of synthetic or biological compounds for their ability to bind DNA test sequences. The assay is versatile in that any number of test sequences can be tested by placing the test sequence adjacent to a defined protein binding screening sequence. Binding of molecules to these test sequence changes the binding characteristics of the protein molecule to its cognate binding sequence. When such a molecule binds the test sequence the equilibrium of the DNA:protein complexes is disturbed, generating changes in the concentration of free DNA probe. Numerous exemplary target test sequences (SEQ ID NO:1 to SEQ ID NO:600) are set forth. The assay of the present invention is also useful to characterize the preferred binding sequences of any selected DNA-binding molecule.

L15 ANSWER 48 OF 86 USPATFULL
ACCESSION NUMBER: 96:70190 USPATFULL
TITLE: Treating hypersensitivities with anti-IGE **monoclonal antibodies** which bind to IGE-expressing B cells but not **basophils**
INVENTOR(S): Chang, Tse W., Houston, TX, United States
PATENT ASSIGNEE(S): Tanox Biosystems, Inc., Houston, TX, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5543144	960806
APPLICATION INFO.:	US 93-7180	930121 (8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 89-357483, filed on 26 May 1989, now patented, Pat. No. US 5420251 which is a continuation-in-part of Ser. No. US 88-291068, filed on 28 Dec 1988, now abandoned which is a continuation-in-part of Ser. No. US 88-226421, filed on 29 Jul 1988, now patented, Pat. No. US 5422258 which is a continuation-in-part of Ser. No. US 87-140036, filed on 31 Dec 1987, now abandoned
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Hutzell, Paula K.
LEGAL REPRESENTATIVE: Mirabel, Eric P.
NUMBER OF CLAIMS: 6
EXEMPLARY CLAIM: 1
LINE COUNT: 1762
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention relates to methods of treating **allergic** reactions and of **reducing** circulating IgE using **antibodies** which bind to secreted IgE and membrane-bound IgE on the surface of IgE-producing B cells but not to IgE on **basophils** or **mast cells**.

L15 ANSWER 49 OF 86 USPATFULL
ACCESSION NUMBER: 96:38997 USPATFULL
TITLE: Peptides representing antigenic epitopes of dog IgE present on B cell but not **basophil** surface
INVENTOR(S): Chang, Tse W., Houston, TX, United States
PATENT ASSIGNEE(S): Tanox Biosystems, Inc., Houston, TX, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5514776	960507
APPLICATION INFO.:	US 94-326767	941020 (8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 93-137253, filed on 14 Oct 1993 which is a continuation-in-part of Ser. No. US 93-90527, filed on 9 Jul 1993, now patented, Pat. No. US 5342924 which is a continuation-in-part of Ser. No. US 92-973321, filed on 29 Oct 1992, now patented, Pat. No. US 5254671 which is a continuation-in-part of Ser. No. US 90-515604, filed on 27 Apr 1990, now patented, Pat. No. US 5274075 which is a continuation-in-part of Ser. No. US 90-468766, filed on 23 Jan 1990, now patented, Pat. No. US 5260416 which is a continuation-in-part of Ser. No. US 89-369625, filed on 21 Jun 1989 which is a continuation-in-part of Ser. No. US 88-272243, filed on 16 Nov 1988, now patented, Pat. No. US 5091313 which is a continuation-in-part of Ser. No. US 88-229178, filed on 5 Aug 1988, now abandoned which is a continuation-in-part of Ser. No. US 88-226421, filed on 29 Jul 1988 which is a continuation-in-part of Ser. No. US 87-140036, filed on 31 Dec 1987, now abandoned
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Adams, Donald E.
LEGAL REPRESENTATIVE: Mirabel, Eric P.
NUMBER OF CLAIMS: 1
EXEMPLARY CLAIM: 1
LINE COUNT: 467
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Antigenic epitopes associated with the extracellular segment of the domain which anchors dog immunoglobulin-.epsilon. to the B cell membrane are disclosed. The epitopes are present on dog IgE-bearing B cells but not **basophils** or the secreted, soluble form of dog IgE. The peptides representing the epitopes associated with the anchor domain of dog IgE can be used to generate **antibodies** against these regions.

L15 ANSWER 50 OF 86 USPATFULL
ACCESSION NUMBER: 96:36286 USPATFULL
TITLE: Methods for the selective suppression of an immune response to dust mite der Pi
INVENTOR(S): Byers, Vera S., San Francisco, CA, United States
Baldwin, Robert W., Long Eaton, England
PATENT ASSIGNEE(S): Allergene, Inc., San Mateo, CA, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5512283	960430
APPLICATION INFO.:	US 93-123746	930916 (8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 93-11050, filed on 29 Jan 1993, now abandoned And Ser. No. US 92-849222, filed on 10 Mar 1992, now abandoned which is a continuation-in-part of Ser. No. US 90-549184, filed on 6 Jul 1990, now abandoned
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Adams, Donald E.
LEGAL REPRESENTATIVE: Pennie & Edmonds
NUMBER OF CLAIMS: 10
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 47 Drawing Figure(s); 28 Drawing Page(s)
LINE COUNT: 2757
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides novel compositions and methods useful in the modulation or selective suppression of host immune responses to an immunogen of interest, particularly to immunogens which are exogenous antigens or **allergens**. Subject compositions include **antibody**, **antibody** derived, and **antibody**-like molecules of primary antigen reactivity with respect to the immunogen of interest. **Antibodies** or **antibody**-like or **antibody** -derived molecules include **antibody** fragments such as Fab, and complementarity determining region peptides (CDRs) which may be grafted into a framework region of any species, particularly human. They also include human **antibodies**, derived from sensitized human lymphocytes produced by cell fusion with heterohybridomas, or by DNA cloning and expression. Other compositions include T cell receptor (TCR) molecules, obtained either from T cell clones or hybridomas or as purified TCR preparations. Immunoreactive peptides corresponding to some or all of the complementarity determining regions or hypervariable regions of the TCR are also employed.

L15 ANSWER 51 OF 86 USPATFULL
ACCESSION NUMBER: 95:110431 USPATFULL
TITLE: Method of **inhibiting** pro-inflammatory mediator release from **basophils** and **mast cells**
INVENTOR(S): Kuna, Piotr, Port Jefferson, NY, United States
Kaplan, Allen P., St. James, NY, United States
PATENT ASSIGNEE(S): The Research Foundation of State University of New York, Stony Brook, NY, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5474983	951212
APPLICATION INFO.:	US 93-31772	930315 (8)

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Sayala, Chhaya D.
LEGAL REPRESENTATIVE: Fish & Richardson
NUMBER OF CLAIMS: 18
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 5 Drawing Figure(s); 5 Drawing Page(s)
LINE COUNT: 852
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A method of **inhibiting** pro-inflammatory mediator release from **basophils** or **mast cells** to treat an inflammatory disease in a mammal, comprising administering to the mammal a therapeutically effective amount of one or more of the following proteins, MIP-1.alpha., MIP-1.beta., CTAP-III, or IP-10.

L15 ANSWER 52 OF 86 USPATFULL
ACCESSION NUMBER: 95:82354 USPATFULL
TITLE: **Monoclonal antibodies** that bind to soluble IGE but do not bind IGE on IGE expressing B lymphocytes or **basophils**
INVENTOR(S): Chang, Tse-wen, Houston, TX, United States
PATENT ASSIGNEE(S): Tanox Biosystems, Inc., Houston, TX, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5449760	950912
APPLICATION INFO.:	US 89-320294	890306 (7)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 88-291068, filed on 28 Dec 1988, now abandoned which is a continuation-in-part of Ser. No. US 88-226421,

filed on 29 Jul 1988, now patented, Pat. No. US 5422258 which is a continuation-in-part of Ser. No. US 87-140036, filed on 31 Dec 1987, now abandoned
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Hutzell, Paula K.
LEGAL REPRESENTATIVE: Mirabel, Eric P.; DeConti, Jr., Giulio A.
NUMBER OF CLAIMS: 5
EXEMPLARY CLAIM: 1
LINE COUNT: 726
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB **Antibodies** that bind soluble IgE but not IgE on the surface of B lymphocytes or **basophils** are described. The **antibodies** do not induce histamine release by **basophils** or **mast cells**.

L15 ANSWER 53 OF 86 USPATFULL
ACCESSION NUMBER: 95:67213 USPATFULL
TITLE: Use of platelet factor 4 to treat inflammatory diseases
INVENTOR(S): Kuna, Piotr, Port Jefferson, NY, United States
Kaplan, Allen P., St. James, NY, United States
PATENT ASSIGNEE(S): The Research Foundation of State University of New York, Albany, NY, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5436222	950725
APPLICATION INFO.:	US 93-31773	930315 (8)

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Warden, Jill
ASSISTANT EXAMINER: Davenport, A. M.
LEGAL REPRESENTATIVE: Fish & Richardson
NUMBER OF CLAIMS: 15
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 3 Drawing Figure(s); 3 Drawing Page(s)
LINE COUNT: 716
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A method of treating an inflammatory disease in a mammal, e.g., a human, by **inhibiting** pro-inflammatory mediator release from **basophils** or **mast cells** in the human, by administering to the human a therapeutically effective amount of purified or recombinant platelet factor 4 (PF4), a PF4 analog, or a peptide fragment of PF4 or the analog.

L15 ANSWER 54 OF 86 USPATFULL
ACCESSION NUMBER: 95:58235 USPATFULL
TITLE: Chimeric anti-human IgE-**monoclonal antibody** which binds to secreted IgE and membrane-bound IgE expressed by IgE-expressing B cells but notto IgE bound to FC receptors on **basophils**
INVENTOR(S): Chang, Tse-wen, Houston, TX, United States
PATENT ASSIGNEE(S): Tanox Biosystems, Inc., Houston, TX, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5428133	950627
APPLICATION INFO.:	US 91-809034	911211 (7)

RELATED APPLN. INFO.: Continuation of Ser. No. US 88-291068, filed on 28 Dec 1988, now abandoned which is a continuation-in-part of Ser. No. US 88-226421, filed on 29 Jul 1988 which is a continuation-in-part of Ser. No. US 87-140036, filed on 31 Dec 1987, now abandoned
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Hutzell, Paula
LEGAL REPRESENTATIVE: Mirabel, Eric P.; DeConti, Giulio A.
NUMBER OF CLAIMS: 2
EXEMPLARY CLAIM: 1
LINE COUNT: 1266
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB **Chimeric antibodies** which bind to unique antigenic epitopes of IgE (designated ige.b1) which are present on IgE-bearing B lymphocytes but not **basophils** are described.

L15 ANSWER 55 OF 86 USPATFULL
ACCESSION NUMBER: 95:54300 USPATFULL
TITLE: Therapeutic and diagnostic methods using leukocyte surface antigens
INVENTOR(S): Rittershaus, Charles W., Malden, MA, United States
Tian, Wei-Tao, Allston, MA, United States
Kung, Patrick C., Lexington, MA, United States
PATENT ASSIGNEE(S): T Cell Diagnostics, Inc., Woburn, MA, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5426029	950620
APPLICATION INFO.:	US 90-610494	901107 (7)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 89-434398, filed on 9 Nov 1989, now patented, Pat. No. US 5292636 which is a continuation-in-part of Ser. No. US 88-254551, filed on 6 Oct 1988, now abandoned which is a continuation-in-part of Ser. No. US 87-20819, filed on 2 Mar 1987, now patented, Pat. No. US 5006459 which is a continuation-in-part of Ser. No. US 86-846230, filed on 31 Mar 1986, now abandoned
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Saunders, David
LEGAL REPRESENTATIVE: Pennie & Edmonds
NUMBER OF CLAIMS: 18
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 17 Drawing Figure(s); 12 Drawing Page(s)
LINE COUNT: 4142
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention is directed to the measurement of soluble leukocyte surface markers, soluble T cell growth factor receptors, soluble complement receptors, soluble T cell differentiation antigens, or related soluble molecules or fragments thereof, and the use of such measurements in the diagnosis and therapy of diseases and disorders. The invention is also directed to the measurement of soluble CD35 (sCD35) or fragments thereof, and the use of such measurements in detecting disease or disorders. A polyclonal sandwich assay is provided for the detection and/or measurement of soluble CD35. The invention further relates to the measurement of total leukocyte markers or fragments thereof, and the use of such measurements in the detection and diagnosis of diseases or disorders. The term "total" leukocyte marker used herein refers to the total amount of a leukocyte marker in a sample, including that present in membrane and intracellular compartments and extracellular soluble compartments. Measurements of a total leukocyte marker can be used to determine the approximate amount in a body fluid sample of leukocytes positive for the leukocyte marker. In a further embodiment, the invention relates to the measurement of both the amount of total leukocyte marker and the amount of the soluble form of the leukocyte marker and a comparison of the measured levels.

L15 ANSWER 56 OF 86 USPATFULL
ACCESSION NUMBER: 95:50082 USPATFULL
TITLE: Methods for producing high affinity anti-human IgE-**monoclonal antibodies** which binds to IgE on IgEabearing B cells but not **basophils**
INVENTOR(S): Chang, Tse-wen, Houston, TX, United States
PATENT ASSIGNEE(S): Tanox Biosystems, Inc., Houston, TX, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5422258	950606
APPLICATION INFO.:	US 88-226421	880729 (7)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 87-140036, filed on 31 Dec 1987, now abandoned
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Hutzell, Paula K.
LEGAL REPRESENTATIVE: Mirabel, Eric P.; De Conti, Jr., Givlio A.
NUMBER OF CLAIMS: 6
EXEMPLARY CLAIM: 1
LINE COUNT: 1110
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Methods of producing **monoclonal antibodies** that bind to unique antigenic epitopes of IgE (designated ige.bl) which are present on IgE-bearing B cells but not **basophils** are described. The **monoclonal antibodies** block binding of IgE to **mast cells** and **basophils** in vitro.

L15 ANSWER 57 OF 86 USPATFULL
ACCESSION NUMBER: 95:47846 USPATFULL
TITLE: Anti-idiotype **antibodies** specific for the parotope of **antibodies** which bind to IgE-bearing B cells but not **basophils**
INVENTOR(S): Chang, Tse-wen, Houston, TX, United States
Sun, Bill N., Houston, TX, United States
Sun, Cecily R., Houston, TX, United States
PATENT ASSIGNEE(S): Tanox Biosystems, Inc., Houston, TX, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5420251	950530
APPLICATION INFO.:	US 89-357483	890526 (7)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 88-291068, filed on 28 Dec 1988, now abandoned which is a continuation-in-part of Ser. No. US 88-226421, filed on 29 Jul 1988 which is a continuation-in-part of Ser. No. US 87-140036, filed on 31 Dec 1987, now abandoned
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Hutzell, Paula K.
LEGAL REPRESENTATIVE: Mirabel, Eric P.; DeConti, Jr., Giulio A.
NUMBER OF CLAIMS: 3
EXEMPLARY CLAIM: 1
LINE COUNT: 1365
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Anti-idiotypic **monoclonal antibodies** that recognize the paratope of **monoclonal antibodies** specific for unique antigenic epitopes of IgE (designated ige.bl) which are present on membrane-bound IgE-expressed by bearing B cells but not on IgE bound to **Fc.epsilon.R** on **basophils** are described.

L15 ANSWER 58 OF 86 USPATFULL
ACCESSION NUMBER: 94:93425 USPATFULL
TITLE: Chimeric chains for receptor-associated signal transduction pathways
INVENTOR(S): Capon, Daniel J., Hillsborough, CA, United States
Weiss, Arthur, Mill Valley, CA, United States
Irving, Brian A., San Francisco, CA, United States
Roberts, Margo R., San Francisco, CA, United States
Zsebo, Krisztina, Woodside, CA, United States
PATENT ASSIGNEE(S): Cell Genesys, Inc., Foster City, CA, United States (U.S. corporation)
The Regents of the University of California, Oakland, CA, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5359046	941025
APPLICATION INFO.:	US 92-988194	921209 (7)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 90-627643, filed on 14 Dec 1990, now abandoned
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Hill, Jr., Robert J.
ASSISTANT EXAMINER: Wang, Gian P.
LEGAL REPRESENTATIVE: Rowland, Bertram I.

NUMBER OF CLAIMS: 21
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 41 Drawing Figure(s); 10 Drawing Page(s)
LINE COUNT: 2058
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Chimeric proteins and DNA sequence encoding chimeric proteins are provided, where the chimeric proteins are characterized by an extracellular domain capable of binding to a ligand in a non-MHC restricted manner, a transmembrane domain and a cytoplasmic domain capable of activating a signaling pathway. The extracellular domain and cytoplasmic domain are not naturally found together. Binding of ligand to the extracellular domain results in transduction of a signal and activation of a signaling pathway in the cell, whereby the cell may be induced to carry out various functions relating to the signalling pathway. A wide variety of extracellular domains may be employed as receptors, where such domains may be naturally occurring or synthetic. The chimeric DNA sequences may be used to modify lymphocytes as well as hematopoietic stem cells as precursors to a number of important cell types.

L15 ANSWER 59 OF 86 USPATFULL
ACCESSION NUMBER: 94:75603 USPATFULL
TITLE: Extracellular segments of human .epsilon. immunoglobulin anchoring peptides and **antibodies** specific therefor
INVENTOR(S): Chang, Tse W., Houston, TX, United States
PATENT ASSIGNEE(S): Tanox Biosystems, Inc., Houston, TX, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5342924	940830
APPLICATION INFO.:	US 93-90527	930709 (8)
DISCLAIMER DATE:	20090225	

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 92-973321, filed on 29 Oct 1992, now patented, Pat. No. US 5254671 which is a continuation-in-part of Ser. No. US 90-515604, filed on 27 Apr 1990, now patented, Pat. No. US 5274075 which is a continuation-in-part of Ser. No. US 90-468766, filed on 23 Jan 1990, now patented, Pat. No. US 5260416 which is a continuation-in-part of Ser. No. US 89-369625, filed on 21 Jun 1989, now abandoned which is a continuation-in-part of Ser. No. US 88-272243, filed on 16 Nov 1988, now patented, Pat. No. US 5091313 which is a continuation-in-part of Ser. No. US 88-229178, filed on 5 Aug 1988, now abandoned which is a continuation-in-part of Ser. No. US 88-226421, filed on 29 Jun 1988 which is a continuation-in-part of Ser. No. US 87-140036, filed on 31 Dec 1987, now abandoned
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Chan, Christina Y.
ASSISTANT EXAMINER: Eisenchenk, F. Christopher
LEGAL REPRESENTATIVE: Mirabel, Eric P.
NUMBER OF CLAIMS: 3
EXEMPLARY CLAIM: 1
LINE COUNT: 1345
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Antigenic epitopes associated with the extracellular segment of the domain which anchors immunoglobulins to the B cell membrane are disclosed. For IgE, the epitopes are present on IgE-bearing B cells but not **basophils** or the secreted, soluble form of IgE. Three different isoforms of the C-terminal segment of the human .epsilon. chain resulting from alternative mRNA splicings in the membrane exon region are disclosed, one of which is secreted and not membrane-bound.

L15 ANSWER 60 OF 86 USPATFULL
ACCESSION NUMBER: 94:20299 USPATFULL
TITLE: **Chimeric monoclonal antibodies** which bind to the extracellular segment of the membrane-bound domain of a human membrane-bound immunoglobulin
INVENTOR(S): Chang, Tse W., Houston, TX, United States
PATENT ASSIGNEE(S): Tanox Biosystems, Inc., Houston, TX, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5292867	940308
APPLICATION INFO.:	US 93-3839	930111 (8)
DISCLAIMER DATE:	20090107	

RELATED APPLN. INFO.: Continuation of Ser. No. US 92-817918, filed on 6 Jan 1992, now abandoned which is a division of Ser. No. US 88-272243, filed on 16 Nov 1988, now patented, Pat. No. US 5091313
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Nucker, Christine M.
ASSISTANT EXAMINER: Dubrule, Chris
LEGAL REPRESENTATIVE: Mirabel, Eric P.
NUMBER OF CLAIMS: 2
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 3 Drawing Figure(s); 3 Drawing Page(s)
LINE COUNT: 655
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Antigenic epitopes associated with the extracellular segment of the domain which anchors immunoglobulins to the B cell membrane are disclosed. For IgE, the epitopes are present on IgE-bearing B cells but not **basophils** or the secreted, soluble form of IgE. The epitope can be exploited for therapy and diagnosis. For example, **antibodies** or immunotoxins specific for the epitopes associated with the anchor domain of IgE can be used to selectively destroy IgE-bearing lymphocytes, thus blocking IgE-mediated **allergic** reactions.

L15 ANSWER 61 OF 86 USPATFULL
ACCESSION NUMBER: 94:1209 USPATFULL
TITLE: **Allergen**-thymic hormone conjugates for treatment of IgE mediated **allergies**
INVENTOR(S): Wojdani, Aristo, Los Angeles, CA, United States
PATENT ASSIGNEE(S): Allergy Immuno Technologies, Inc., Newport Beach, CA, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5275814	940104
APPLICATION INFO.:	US 91-728185	910710 (7)

RELATED APPLN. INFO.: Division of Ser. No. US 90-534237, filed on 7 Jun 1990, now patented, Pat. No. US 5116612 which is a division of Ser. No. US 87-65310, filed on 23 Jun 1987, now patented, Pat. No. US 4946945
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Kim, Kay K.
LEGAL REPRESENTATIVE: Quinton, James A.; Frisenda, Jr., Frank
NUMBER OF CLAIMS: 10
EXEMPLARY CLAIM: 1,8
NUMBER OF DRAWINGS: 2 Drawing Figure(s); 2 Drawing Page(s)
LINE COUNT: 837
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A protein conjugate or mixture useful in immunotherapy composed of a biological response modifier (BRM) and an **allergen** is disclosed. In use the protein conjugate or mixture is combined with a pharmaceutically acceptable carrier. Cytokines, bacterial, fungal and viral immunopotentiators and thymus hormones are disclosed as suitable BRM's for use in the invention.

L15 ANSWER 62 OF 86 USPATFULL
ACCESSION NUMBER: 93:93905 USPATFULL
TITLE: Antigenic epitopes present on membrane-bound but not secreted IgE
INVENTOR(S): Chang, Tse-wen, Houston, TX, United States
PATENT ASSIGNEE(S): Tanox Biosystems, Inc., Houston, TX, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5260416	931109
APPLICATION INFO.:	US 90-468766 900123 (7)	

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 89-369625, filed on 21 Jun 1989, now abandoned which is a continuation-in-part of Ser. No. US 88-272243, filed on 16 Nov 1988, now patented, Pat. No. US 5091313 which is a continuation-in-part of Ser. No. US 88-229178, filed on 5 Aug 1988, now abandoned which is a continuation-in-part of Ser. No. US 88-226421, filed on 29 Jul 1988 which is a continuation-in-part of Ser. No. US 87-140036, filed on 31 Dec 1987, now abandoned
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Lee, Lester L.
LEGAL REPRESENTATIVE: Mirabel, Eric P.; DeConti, Jr., Giulio A.
NUMBER OF CLAIMS: 3
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 4 Drawing Figure(s); 3 Drawing Page(s)
LINE COUNT: 859
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Antigenic epitopes associated with the extracellular segment of the domain which anchors immunoglobulins to the B cell membrane are disclosed. For IgE, the epitopes are present on IgE-bearing B cells but not **basophils** or the secreted, soluble form of IgE. The epitope can be exploited for therapy and diagnosis. For example, **antibodies** or immunotoxins specific for the epitopes associated with the anchor domain of IgE can be used to selectively destroy IgE-bearing lymphocytes, thus blocking IgE-mediated **allergic** reactions.

L15 ANSWER 63 OF 86 USPATFULL
ACCESSION NUMBER: 93:87456 USPATFULL
TITLE: Extracellular segments of human e immunoglobulin anchoring peptides and **antibodies** specific therefor
INVENTOR(S): Chang, Tse W., Houston, TX, United States
PATENT ASSIGNEE(S): Tanox Biosystems, Inc., Houston, TX, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5254671	931019
APPLICATION INFO.:	US 92-973321	921029 (7)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 90-515604, filed on 27 Apr 1990, now abandoned
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Chan, Y. Christina
ASSISTANT EXAMINER: Eisenchenk, F. C.
LEGAL REPRESENTATIVE: Mirabel, Eric P.
NUMBER OF CLAIMS: 3
EXEMPLARY CLAIM: 1
LINE COUNT: 1331
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Antigenic epitopes associated with the extracellular segment of the domain which anchors immunoglobulins to the B cell membrane are disclosed. For IgE, the epitopes are present on IgE-bearing B cells but not **basophils** or the secreted, soluble form of IgE. The epitope can be exploited for therapy and diagnosis. For example, **antibodies** or immunotoxins specific for the epitopes associated with the anchor domain of IgE can be used to selectively destroy or downregulate IgE-bearing lymphocytes, thus blocking IgE-mediated **allergic** reactions. Three different isoforms of the C-terminal segment of the human .epsilon. chain resulting from alternative mRNA splicings in the membrane exon region are disclosed, one of which is secreted and not membrane-bound.

L15 ANSWER 64 OF 86 USPATFULL
ACCESSION NUMBER: 93:85018 USPATFULL
TITLE: Method of making **antibodies** to antigenic epitopes of IGE present on B cells but not **basophil** cell surface or secreted, soluble IGE
INVENTOR(S): Chang, Tse W., Houston, TX, United States
PATENT ASSIGNEE(S): Tanox Biosystems, Inc., Houston, TX, United States (U.S. corporation)

NUMBER DATE

PATENT INFORMATION: US 5252467 931012
APPLICATION INFO.: US 92-817916 920106 (7)
RELATED APPLN. INFO.: Division of Ser. No. US 88-272243, filed on 16 Nov 1988, now patented, Pat. No. US 5091313 which is a continuation-in-part of Ser. No. US 88-229178, filed on 5 Aug 1988, now abandoned which is a continuation-in-part of Ser. No. US 88-226421, filed on 29 Jul 1988 which is a continuation-in-part of Ser. No. US 87-140036, filed on 31 Dec 1987, now abandoned
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Lacey, David L.
ASSISTANT EXAMINER: Hutzell, Paula
LEGAL REPRESENTATIVE: Mirabel, Eric P.
NUMBER OF CLAIMS: 8
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 3 Drawing Figure(s); 3 Drawing Page(s)
LINE COUNT: 693
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A method for producing **antibodies** specific for antigenic associated with the extracellular segment of the domain which anchors immunoglobulins to the B cell membrane is disclosed. The epitopes recognized by the **antibodies** of the invention are present on IgE-bearing B cells but not **basophils** or in the secreted, soluble form of IgE.

L15 ANSWER 65 OF 86 USPATFULL
ACCESSION NUMBER: 93:74071 USPATFULL
TITLE: Method of **reducing** cellular immune response involving T-cells using CD8-bearing antigen presenting cells
INVENTOR(S): Tykocinski, Mark L., Shaker Heights, OH, United States
Kaplan, David R., Cleveland Heights, OH, United States
PATENT ASSIGNEE(S): TKB Associates Limited Partnership, Cleveland, OH, United States (U.S. corporation)

NUMBER DATE

PATENT INFORMATION: US 5242687 930907
APPLICATION INFO.: US 91-691475 910425 (7)
RELATED APPLN. INFO.: Continuation of Ser. No. US 89-429401, filed on 31 Oct 1989, now abandoned And a continuation-in-part of Ser. No. US 89-323770, filed on 15 Mar 1989, now abandoned
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Nucker, Christine M.
ASSISTANT EXAMINER: Cunningham, T.
LEGAL REPRESENTATIVE: Lyon & Lyon
NUMBER OF CLAIMS: 7
EXEMPLARY CLAIM: 1
LINE COUNT: 1083
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Specific and nonspecific immunomodulation, enhancement of cellular engraftment, and modulation of nonimmune cells are achieved by using various membrane-binding and soluble CD8 compositions.

L15 ANSWER 66 OF 86 USPATFULL
ACCESSION NUMBER: 93:61035 USPATFULL
TITLE: DNA encoding murine-human **chimeric antibodies** specific for antigenic epitopes of IgE present on the extracellular segment of the membrane domain of membrane-bound IgE
INVENTOR(S): Chang, Tse W., Houston, TX, United States
PATENT ASSIGNEE(S): Tanox Biosystems, Inc., Houston, TX, United States (U.S. corporation)

NUMBER DATE

PATENT INFORMATION: US 5231026 930727
APPLICATION INFO.: US 92-818781 920106 (7)
RELATED APPLN. INFO.: Division of Ser. No. US 88-272243, filed on 16 Nov 1988, now patented, Pat. No. US 5091313 which is a continuation-in-part of Ser. No. US 88-229178, filed on 5 Aug 1988, now abandoned which is a continuation-in-part of Ser. No. US 88-226421, filed on 29 Jul 1988, now abandoned which is a continuation-in-part of Ser. No. US 87-140036, filed on 31 Dec 1987, now abandoned
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Lacey, David L.
ASSISTANT EXAMINER: Hutzell, Paula
LEGAL REPRESENTATIVE: Mirabel, Eric P.
NUMBER OF CLAIMS: 4
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 3 Drawing Figure(s); 3 Drawing Page(s)
LINE COUNT: 667
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Antigenic epitopes associated with the extracellular segment of the domain which anchors immunoglobulins to the B cell membrane are disclosed. For IgE, the epitopes are present on IgE-bearing B cells but not **basophils** or the secreted, soluble form of IgE. DNA constructs encoding **chimeric antibodies**, with murine variable regions and human constant regions, which bind to this epitope, can be produced and expressed in transfected mycloma cells.

L15 ANSWER 67 OF 86 USPATFULL
ACCESSION NUMBER: 93:46584 USPATFULL
TITLE: Method for **inhibiting** IgE production
INVENTOR(S): Levine, Alan D., Ballwin, MO, United States
Collins, Paul W., Deerfield, IL, United States
PATENT ASSIGNEE(S): G. D. Searle & Co., Chicago, IL, United States (U.S. corporation)

NUMBER DATE

PATENT INFORMATION: US 5218139 930608
APPLICATION INFO.: US 92-892870 920603 (7)
RELATED APPLN. INFO.: Division of Ser. No. US 90-635000, filed on 27 Dec 1990, now patented, Pat. No. US 5157052
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Gerstl, Robert
LEGAL REPRESENTATIVE: Williams, Roger A.; Matukaitis, Paul D.
NUMBER OF CLAIMS: 1
EXEMPLARY CLAIM: 1
LINE COUNT: 1430
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A method is described for **inhibiting** IgE production which comprises administering, in an amount effective to **inhibit** IgE production, a prostaglandin of the formula: ##STR1## or a pharmaceutically acceptable non-toxic salt thereof, in which R is hydrogen, C.sub.1 -C.sub.5 alkyl, C.sub.3 -C.sub.8 cycloalkyl, phenyl, or mono, di- or tri-substituted phenyl in which the substituents are selected form the group consisting of bromo, chloro, fluoro, iodo, C.sub.1 -C.sub.5 alkyl, hydroxy, nitro, acetyl, alkoxy, carboxy, acetoxy, amino, mono- or di- alkyl amino, amido and acetamido; R.sub.1 and R.sub.2 independently are hydrogen or C.sub.1 -C.sub.5 alkyl, n.sub.3, n.sub.4, n.sub.5, n.sub.6, n.sub.7, and n.sub.8 independently are zero or one; when n's are zeros, R.sub.3 and R.sub.4 together, R.sub.4 and R.sub.5 together, R.sub.5 and R.sub.6 together, and R.sub.7 and R.sub.8 together are double bonds; when n's are ones, R.sub.3, R.sub.5, R.sub.6 R.sub.7 and R.sub.8 independently are hydrogen, R.sub.4 is hydrogen or methyl, or R.sub.3 and R.sub.4 together, R.sub.4 and R.sub.5 together, or R.sub.5 and R.sub.6 together are methylene.

L15 ANSWER 68 OF 86 USPATFULL
ACCESSION NUMBER: 93:5465 USPATFULL
TITLE: Polypeptide **competitor** for immunoglobulin E
INVENTOR(S): Gould, Hannah J., London, England
Helm, Birgit A., Loughton, England
PATENT ASSIGNEE(S): Research Corporation Limited, London, England (non-U.S. corporation)

NUMBER DATE

PATENT INFORMATION: US 5180805 930119
WO 8800204 880114
APPLICATION INFO.: US 91-730530 910715 (7)
WO 87-GB466 870702
890224 PCT 371 date
890224 PCT 102(e) date
RELATED APPLN. INFO.: Continuation of Ser. No. US 89-295033, filed on 24 Feb 1989, now abandoned

NUMBER DATE

PRIORITY INFORMATION: GB 86-16166 860702
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Lacey, David L.
ASSISTANT EXAMINER: Guest, Shelly J.
LEGAL REPRESENTATIVE: Nixon & Vanderhye
NUMBER OF CLAIMS: 8
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 2 Drawing Figure(s); 2 Drawing Page(s)
LINE COUNT: 492
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A **competitor** for human Immunoglobulin E (IgE) comprises a polypeptide which has a core sequence of seventy-six amino acids which is shown, together with the corresponding DNA sequence coding therefor, in FIG. 2. This amino acid sequence, numbered 1 to 76, corresponds to amino acids 301 to 376 of the epsilon heavy cain of IgE. The polypeptide may also include additional short sequences at the beginning and/or end of the core sequence which are physiologically harmless and do not contribute to the ability of the core sequence to bind **compete** with native IgE for the high-affinity receptor sites on human cells. The polypeptide is indicated for the treatment of Type I hypersensitivity reactions such as hay fever. The polypeptide may be produced synthetically or by expression from Escherichia coli containing a plasmid having a DNA segment coding for the polypeptide.

L15 ANSWER 69 OF 86 USPATFULL
ACCESSION NUMBER: 92:86982 USPATFULL
TITLE: Method for **inhibiting** IgE production
INVENTOR(S): Levine, Alan D., Ballwin, MO, United States
Collins, Paul W., Deerfield, IL, United States
PATENT ASSIGNEE(S): Monsanto Company, St. Louis, MO, United States (U.S. corporation)

NUMBER DATE

PATENT INFORMATION: US 5157052 921020
APPLICATION INFO.: US 90-635000 901227 (7)
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Gerstl, Robert
LEGAL REPRESENTATIVE: Bennett, Dennis A.
NUMBER OF CLAIMS: 14
EXEMPLARY CLAIM: 1
LINE COUNT: 1444
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A method is described for **inhibiting** IgE production which comprises administering, in an amount effective to **inhibit** IgE production, a prostaglandin of the formula: ##STR1## or a pharmaceutically acceptable non-toxic salt thereof, in which R is hydrogen, C.sub.1 -C.sub.5 alkyl, C.sub.3 -C.sub.8 cycloalkyl, phenyl, or mono, di- or tri-substituted phenyl in which the substituents, are selected from the group consisting of bromo, chloro, fluoro, iodo, C.sub.1 -C.sub.5 alkyl, hydroxy, nitro, acetyl, alkoxy, carboxy, acetoxy, amino, mono- or di- alkyl amino, amido and acetamido; R.sub.1 and R.sub.2 independently are hydrogen or C.sub.1 -C.sub.5 alkyl, n.sub.3, n.sub.4, n.sub.5, n.sub.6, n.sub.7, and n.sub.8 independently are zero or one; when n's are zeros, R.sub.3 and R.sub.4 together, R.sub.4 and R.sub.5 together, R.sub.5 and R.sub.6 together, and R.sub.7 and R.sub.8 together are double bonds; when n's are ones, R.sub.3, R.sub.5, R.sub.6, R.sub.7 and R.sub.8 independently are hydrogen, R.sub.4 is hydrogen or methyl, or R.sub.3 and R.sub.4 together, R.sub.4

and R.sub.5 together, or R.sub.5 and R.sub.6 together are methylene.

L15 ANSWER 70 OF 86 USPATFULL
ACCESSION NUMBER: 92:42538 USPATFULL
TITLE: Immunotherapy agents for treatment of IgE mediated allergies
INVENTOR(S): Wojdani, Aristo, Los Angeles, CA, United States
PATENT ASSIGNEE(S): Allergy Immuno Technologies, Inc., Newport Beach, CA, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5116612	920526
APPLICATION INFO.:	US 90-534237	900607 (7)

RELATED APPLN. INFO.: Division of Ser. No. US 87-65310, filed on 23 Jun 1987, now patented, Pat. No. US 4946945, issued on 7 Aug 1990
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Russel, Jeffrey E.
ASSISTANT EXAMINER: Kim, Kay
LEGAL REPRESENTATIVE: Quinton, James; Frisenda, Frank
NUMBER OF CLAIMS: 10
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 2 Drawing Figure(s); 2 Drawing Page(s)
LINE COUNT: 826
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A protein conjugate or mixture useful in immunotherapy composed of a biological response modifier (BRM) and an allergen is disclosed. In use the protein conjugate or mixture is combined with a pharmaceutically acceptable carrier. Cytokines, bacterial, fungal and viral immunopotentiators and thymus hormones are disclosed as suitable BRM's for use in the invention.

L15 ANSWER 71 OF 86 USPATFULL
ACCESSION NUMBER: 92:14939 USPATFULL
TITLE: Antigenic epitopes of IgE present on B cell but not basophil surface
INVENTOR(S): Chang, Tse-Wen, Houston, TX, United States
PATENT ASSIGNEE(S): Tanox Biosystems, Inc., Houston, TX, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5091313	920225
APPLICATION INFO.:	US 88-272243	881116 (7)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 88-229178, filed on 5 Aug 1988, now abandoned which is a continuation-in-part of Ser. No. US 88-226421, filed on 29 Jul 1988 which is a continuation-in-part of Ser. No. US 87-140036, filed on 31 Dec 1987, now abandoned
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Doll, John
ASSISTANT EXAMINER: Hutzell, Paula
LEGAL REPRESENTATIVE: Mirabel, Eric P.; DeConti, Giulio A.
NUMBER OF CLAIMS: 11
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 3 Drawing Figure(s); 3 Drawing Page(s)
LINE COUNT: 704
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Antigenic epitopes associated with the extracellular segment of the domain which anchors immunoglobulins to the B cell membrane are disclosed. For IgE, the epitopes are present on IgE-bearing B cells but not basophils or the secreted, soluble form of IgE. The epitope can be exploited for diagnosis.

L15 ANSWER 72 OF 86 USPATFULL
ACCESSION NUMBER: 91:50317 USPATFULL
TITLE: Treatment of allergy and composition therefor
INVENTOR(S): Saint-Remy, Jean-Marie, Grez-Doiceau, Belgium
Lebrun, Philippe, Namur, Belgium
Lebeque, Serge, Brussels, Belgium
Masson, Pierre L., Brussels, Belgium
PATENT ASSIGNEE(S): Baxter International, Inc., Deerfield, IL, United States (U.S. corporation)
International Institute of Cellular and Molecular Pathology, Brussels, Belgium (non-U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5026545	910625
APPLICATION INFO.:	US 89-410021	890920 (7)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 84-651073, filed on 17 Sep 1984, now patented, Pat. No. US 4740371
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Draper, Garnette D.
LEGAL REPRESENTATIVE: Lane, Aitken & McCann
NUMBER OF CLAIMS: 26
EXEMPLARY CLAIM: 1
LINE COUNT: 1156
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A pharmaceutical composition comprises an immune complex of an allergen and a purified antibody specific thereto, the allergen being selected from a specific subclass of antigen which causes immediate hypersensitivity that is mediated by IgE antibody, and a pharmacologically acceptable carrier or diluent. The method of using the compositions in the treatment of immediate hypersensitivity to the allergen is also described.

L15 ANSWER 73 OF 86 USPATFULL
ACCESSION NUMBER: 91:40676 USPATFULL
TITLE: Mammalian interleukin-4
INVENTOR(S): Lee, Frank, Palo Alto, CA, United States
Yokota, Takashi, Palo Alto, CA, United States
Arai, Ken-ichi, Palo Alto, CA, United States
Mosmann, Timothy, Atherton, CA, United States
Rennick, Donna, Los Altos, CA, United States
PATENT ASSIGNEE(S): Schering Corporation, Madison, NJ, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5017691	910521
APPLICATION INFO.:	US 86-908215	860917 (6)
DISCLAIMER DATE:	20080507	

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 86-881553, filed on 3 Jul 1986, now abandoned which is a continuation-in-part of Ser. No. US 86-843958, filed on 25 Mar 1986 which is a continuation-in-part of Ser. No. US 85-799668, filed on 19 Nov 1985, now abandoned
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Teskin, Robin
ASSISTANT EXAMINER: Ellis, Joan
LEGAL REPRESENTATIVE: Macevicz, Stephen C.
NUMBER OF CLAIMS: 9
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 4 Drawing Figure(s); 3 Drawing Page(s)
LINE COUNT: 2748
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Mammalian proteins and muteins thereof, designated interleukin-4s (IL-4s), are provided which exhibit both B cell growth factor activity and T cell growth factor activity. Compounds of the invention include native human and murine IL-4s, muteins thereof, and nucleic acids which are effectively homologous to disclosed cDNAs, and/or which are capable of coding for mammalian IL-4s and their muteins.

L15 ANSWER 74 OF 86 USPATFULL
ACCESSION NUMBER: 91:17203 USPATFULL
TITLE: Cromolyn binding protein in highly purifed form, and methods for the isolation thereof
INVENTOR(S): Pecht, Israel, Rehovot, Israel
Hemmerich, Stefan, Konstanz, Germany, Federal Republic of
PATENT ASSIGNEE(S): Yeda Research & Development Co., Ltd., Rehovot, Israel (non-U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 4996296	910226
APPLICATION INFO.:	US 87-78134	870727 (7)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 86-843912, filed on 20 Mar 1986, now patented, Pat. No. US 4683135 which is a continuation of Ser. No. US 83-517843, filed on 27 Jul 1983, now abandoned
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Draper, Garnette
ASSISTANT EXAMINER: Kushan, Jeff
LEGAL REPRESENTATIVE: Browdy and Neimark
NUMBER OF CLAIMS: 10
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 11 Drawing Figure(s); 9 Drawing Page(s)
LINE COUNT: 997
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Substantially pure cromolyn binding protein is prepared by means of affinity chromatography of cromolyn derivatives bound to insoluble matrices. Aminocromolyn is prepared by a six-step synthesis and amine derivatives thereof are prepared by conventional means. Obtaining a compound having an amine group instead of the OH group at the 2-carbon of the propane link of cromolyn permits many kinds of reactions without interfering with the portion of the cromolyn molecule with causes its pharmacological activity. The cromolyn derivatives can be conjugated to proteins such as BSA by means of glutaraldehyde cross-linking and such conjugates can be covalently bound to agarose beads. Cromolyn binding protein can be isolated by passing lysates of RBL-2H3 cells through chromatographic columns packed with such beads. The cromolyn binding protein can be further purified by means of lectin-agarose columns.

L15 ANSWER 75 OF 86 USPATFULL
ACCESSION NUMBER: 90:78170 USPATFULL
TITLE: DNA encoding IgE receptor alpha-subunit or fragment thereof
INVENTOR(S): Leder, Philip, Chestnut Hill, MA, United States
Shimizu, Akira, Kyoto, Japan
Siraganian, Reuben, Bethesda, MD, United States
Benfey, Philip, New York, NY, United States
PATENT ASSIGNEE(S): President and Fellows of Harvard College, Cambridge, MA, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 4962035	901009
APPLICATION INFO.:	US 87-127214	871201 (7)

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Hazel, Blondel
LEGAL REPRESENTATIVE: Fish & Richardson
NUMBER OF CLAIMS: 2
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 4 Drawing Figure(s); 6 Drawing Page(s)
LINE COUNT: 275
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A cDNA sequence encoding the .alpha.-subunit of human mast cell IgE surface receptor or an IgE binding fragment thereof.

L15 ANSWER 76 OF 86 USPATFULL
ACCESSION NUMBER: 90:61504 USPATFULL
TITLE: Immunotherapy agents for treatment of IgE mediated allergies
INVENTOR(S): Wojdani, Aristo, Los Angeles, CA, United States
PATENT ASSIGNEE(S): Allergy Immuno Technologies, Inc., Newport Beach, CA, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 4946945	900807
APPLICATION INFO.:	US 87-65310	870623 (7)

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Draper, Garnette
LEGAL REPRESENTATIVE: Quinton, James; Frisenda, Jr., Frank
NUMBER OF CLAIMS: 15
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 2 Drawing Figure(s); 2 Drawing Page(s)
LINE COUNT: 835
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A protein conjugate or mixture useful in immunotherapy composed of a biological response modifier (BRM) and an **allergen** is disclosed. In use the protein conjugate or mixture is combined with a pharmaceutically acceptable carrier. Cytokines, bacterial, fungal and viral immunopotentiators and thymus hormones are disclosed as suitable BRM's for use in the invention.

L15 ANSWER 77 OF 86 USPATFULL
ACCESSION NUMBER: 90:54678 USPATFULL
TITLE: **Monoclonal antibodies** against IgE-associated determinants, hybrid cell lines producing these **antibodies**, and use therefore
INVENTOR(S): Rup, Bonita J., St. Louis, MO, United States
Kahn, Larry E., St. Louis, MO, United States
PATENT ASSIGNEE(S): G. D. Searle & Co., Chicago, IL, United States (U.S. corporation)

NUMBER	DATE
PATENT INFORMATION:	US 4940782 900710
APPLICATION INFO.:	US 87-59749 870608 (7)

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Moskowitz, Margaret
ASSISTANT EXAMINER: Cheney, Kay E.
LEGAL REPRESENTATIVE: Matukaitis, Paul D.; Kanady, Mary Jo
NUMBER OF CLAIMS: 2
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 5 Drawing Figure(s); 5 Drawing Page(s)
LINE COUNT: 522
AB **The present invention is directed to monoclonal antibodies** and hybridomas which produce them, which react with IgE when it is unbound and thereby **inhibit** IgE binding to **mast cells**, and react with IgE when it is bound to the B-cell FcE receptor, but do not react with IgE when it is bound to the **mast cell** FcE receptor.

L15 ANSWER 78 OF 86 USPATFULL
ACCESSION NUMBER: 88:40628 USPATFULL
TITLE: Method of blocking immune complex binding to immunoglobulin Fc receptors
INVENTOR(S): Hahn, Gary S., San Diego, CA, United States
PATENT ASSIGNEE(S): Immunetech Pharmaceuticals, San Diego, CA, United States (U.S. corporation)

NUMBER	DATE
PATENT INFORMATION:	US 4753927 880628
APPLICATION INFO.:	US 86-820137 860121 (6)

RELATED APPLN. INFO.: Division of Ser. No. US 83-522739, filed on 12 Aug 1983, now patented, Pat. No. US 4579840
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Brown, J. R.
ASSISTANT EXAMINER: Moezie, F. T.
LEGAL REPRESENTATIVE: Lyon & Lyon
NUMBER OF CLAIMS: 12
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 5 Drawing Figure(s); 4 Drawing Page(s)
LINE COUNT: 1491
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A method of modulating immune responses in mammals by blocking immune complex binding to immunoglobulin Fc receptors is described, comprising administering a peptide comprising a portion selected from the amino acid sequence

-Pro-Asp-Ala-Arg-His-Ser-Thr-Thr-Gln-Pro-Arg-

Specific uses in **reducing** immune complex mediated inflammation or tissue destruction and in **reducing** the human **allergic** response are disclosed.

L15 ANSWER 79 OF 86 USPATFULL
ACCESSION NUMBER: 88:39188 USPATFULL
TITLE: Method of blocking immune complex binding to immunoglobulin FC receptors
INVENTOR(S): Hahn, Gary S., San Diego, CA, United States
PATENT ASSIGNEE(S): Immunetech Pharmaceuticals, San Diego, CA, United States (U.S. corporation)

NUMBER	DATE
PATENT INFORMATION:	US 4752601 880621
APPLICATION INFO.:	US 86-846930 860401 (6)

RELATED APPLN. INFO.: Division of Ser. No. US 83-522739, filed on 12 Aug 1983, now patented, Pat. No. US 4579840
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Brown, J. R.
ASSISTANT EXAMINER: Moezie, F. T.
LEGAL REPRESENTATIVE: Lyon & Lyon
NUMBER OF CLAIMS: 3
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 5 Drawing Figure(s); 4 Drawing Page(s)
LINE COUNT: 1443
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A method of modulating immune complex mediated immune responses in mammals is described, comprising administering a peptide comprising the amino acid sequence

-Thr-Ile-Ser-Lys-Ala-Lys-Gly-Gln-Pro-Arg-

Specific uses in **reducing** immune complex mediated inflammation or tissue destruction and in modulating the proliferation or function of mononuclear cells are disclosed.

L15 ANSWER 80 OF 86 USPATFULL
ACCESSION NUMBER: 88:36021 USPATFULL
TITLE: Immunosuppressive peptides
INVENTOR(S): Martens, Christine L., Menlo Park, CA, United States
Moore, Kevin W., San Bruno, CA, United States
PATENT ASSIGNEE(S): DNAX Research Institute of Molecular and Cellular Biology, Inc., Palo Alto, CA, United States (U.S. corporation)

NUMBER	DATE
PATENT INFORMATION:	US 4749685 880607
APPLICATION INFO.:	US 86-892588 860801 (6)

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Kight, John
ASSISTANT EXAMINER: Chan, Christina
LEGAL REPRESENTATIVE: Macevicz, Stephen C.
NUMBER OF CLAIMS: 14
EXEMPLARY CLAIM: 1
LINE COUNT: 499
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Immunosuppressive peptides having glycosylation **inhibiting** factor activity are provided. The peptides include the following sequence and its homologs: ##STR1##

L15 ANSWER 81 OF 86 USPATFULL
ACCESSION NUMBER: 88:25942 USPATFULL
TITLE: Treatment of **allergy**
INVENTOR(S): St. Remy, Jean-Marie, Grez-Doiceau, Belgium
Lebrun, Philippe, Namur, Belgium
Lebecque, Serge, Brussels, Belgium
Masson, Pierre, Brussels, Belgium
PATENT ASSIGNEE(S): International Institute of Cellular and Molecular Pathology, Brussels, Belgium (non-U.S. corporation)

NUMBER	DATE
PATENT INFORMATION:	US 4740371 880426
APPLICATION INFO.:	US 84-651073 840917 (6)

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Kight, John
ASSISTANT EXAMINER: Draper, Garnette D.
LEGAL REPRESENTATIVE: Lane & Aitken
NUMBER OF CLAIMS: 18
EXEMPLARY CLAIM: 1
LINE COUNT: 629
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB In the treatment of **allergy**, desensitization is effected by administering the **allergen** in admixture with an **antibody** thereto, the **antibody** being present in a molar excess. The **antibody** is preferably one raised in the patient.

L15 ANSWER 82 OF 86 USPATFULL
ACCESSION NUMBER: 87:56973 USPATFULL
TITLE: Immunotherapeutic polypeptide agents which block immune complex binding to immunoglobulin Fc receptors
INVENTOR(S): Hahn, Gary S., San Diego, CA, United States
PATENT ASSIGNEE(S): Immunetech, Inc., San Diego, CA, United States (U.S. corporation)

NUMBER	DATE
PATENT INFORMATION:	US 4686282 870811
APPLICATION INFO.:	US 83-522738 830812 (6)

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Phillips, Delbert R.
LEGAL REPRESENTATIVE: Lyon & Lyon
NUMBER OF CLAIMS: 5
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 5 Drawing Figure(s); 4 Drawing Page(s)
LINE COUNT: 1423
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Polypeptides which are immunotherapeutic agents which block immune complex binding to immunoglobulin Fc receptors are produced.

L15 ANSWER 83 OF 86 USPATFULL
ACCESSION NUMBER: 87:53730 USPATFULL
TITLE: Immunotherapeutic polypeptide agents which bind to lymphocyte immunoglobulin FC receptors
INVENTOR(S): Hahn, Gary S., San Diego, CA, United States
PATENT ASSIGNEE(S): Immunetech, Inc., San Diego, CA, United States (U.S. corporation)

NUMBER	DATE
PATENT INFORMATION:	US 4683292 870728
APPLICATION INFO.:	US 83-522602 830812 (6)

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Phillips, Delbert R.
LEGAL REPRESENTATIVE: Lyon & Lyon
NUMBER OF CLAIMS: 1
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 4 Drawing Figure(s); 4 Drawing Page(s)
LINE COUNT: 1495
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB An active site peptide which blocks immune complex binding to Fc receptors, the peptide having an amino acid sequence selected from the group consisting of:

A-B-C-D-E-F-G-H-I-J-K-L-M-N-O-P,

or a subgroup thereof,

wherein

A is Arg, Lys, Orn, Gln, or His;

B is Ser, Thr, Ala, or Gly;

C is Thr, Ser, Ala, or Gly;

D is Thr, Ser, Ala, or Gly;

E is Lys, Arg, Orn or His;

F is Thr, Ser, Ala, or Gly;

G is Ser, Thr, Ala, or Gly;

H is Gly, Ala, Thr, Ser, Lys, Arg, or Orn

I is Pro, Val, Leu, Ile, or Ala;

J is Arg, Lys, Orn, or His;

K is Ala, Thr, Ser, or Gly;

L is Ala, Thr, Ser, or Gly;

M is Pro, Val, Leu, Ile, or Ala;

N is Glu, or Asp;

O is Val, Leu, Ile, or Ala;

P is Tyr, or Phe.

and pharmaceutically acceptable salts thereof.

L15 ANSWER 84 OF 86 USPATFULL
ACCESSION NUMBER: 86:69742 USPATFULL
TITLE: Immunotherapeutic antiallergic polypeptide agents which bind to basophil immunoglobin Fc receptors
INVENTOR(S): Hahn, Gary S., Solana Beach, CA, United States
PATENT ASSIGNEE(S): Immunetech Pharmaceuticals, San Diego, CA, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 4628045	861209
APPLICATION INFO.:	US 86-824945	860203 (6)

RELATED APPLN. INFO.: Continuation of Ser. No. US 85-746175, filed on 18 Jun 1985, now abandoned which is a continuation-in-part of Ser. No. US 83-522601, filed on 12 Aug 1983, now abandoned

	NUMBER	DATE
PRIORITY INFORMATION:	ZA 84-6192	840809

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Phillips, Delbert R.
LEGAL REPRESENTATIVE: Lyon & Lyon
NUMBER OF CLAIMS: 1
EXEMPLARY CLAIM: 1
LINE COUNT: 1813
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A peptide having the amino acid sequence Asp-Ser-Glu-Pro-Arg and capable of blocking immune complex binding to immunoglobulin Fc receptors is disclosed.

L15 ANSWER 85 OF 86 USPATFULL
ACCESSION NUMBER: 86:18655 USPATFULL
TITLE: Method of blocking immune complex binding to immunoglobulin Fc receptors
INVENTOR(S): Hahn, Gary S., San Diego, CA, United States
PATENT ASSIGNEE(S): Immunetech Pharmaceuticals, San Diego, CA, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 4579840	860401
APPLICATION INFO.:	US 83-522739	830812 (6)

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Phillips, Delbert R.
LEGAL REPRESENTATIVE: Lyon & Lyon
NUMBER OF CLAIMS: 5
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 5 Drawing Figure(s); 4 Drawing Page(s)
LINE COUNT: 1475
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Methods and peptides for blocking immunoglobin Fc receptors are set forth.

L15 ANSWER 86 OF 86 USPATFULL
ACCESSION NUMBER: 85:73772 USPATFULL
TITLE: Assay methods and systems utilizing mast cell clones
INVENTOR(S): Cantor, Harvey I., Boston, MA, United States
Nabel, Gary, Cambridge, MA, United States
PATENT ASSIGNEE(S): Dana Farber Cancer Institute, Boston, MA, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 4559310	851217
APPLICATION INFO.:	US 83-496543	830520 (6)

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Marantz, Sidney
ASSISTANT EXAMINER: Krawczewicz, Louanne C.
LEGAL REPRESENTATIVE: Conlin, David G.; Linek, Ernest V.
NUMBER OF CLAIMS: 19
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 2 Drawing Figure(s); 1 Drawing Page(s)
LINE COUNT: 727
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention is directed to an in vitro assay, useful in determining the effectiveness of anti-allergy compounds and/or useful in measuring the degree of sensitivity of a patient to particular allergens.

The present invention permits potential anti-allergy agents to be assayed in a number of ways. For example, the binding and dissociation rates of IgE to the mast cells in the presence and the absence of the substance being tested may be measured thereby giving a direct indication of that substance's ability to interfere with the IgE binding reaction. Another measure of a substance's potential as an anti-allergy agent is based upon the release of mediators or other compounds from the mast cells after sensitization by the allergen and exposure of the sensitized cells to the allergen.

The present invention generally involves the following steps:

(a) sensitizing cloned mast cells to an allergen;

(b) exposing sensitized mast cells to the allergen in the presence of a test anti-allergy agent; and

(c) measuring the reaction products of step (b) for an indication of test compound effect.

=> e caplan michael/au

E1	1	CAPLAN MALCOLM/AU
E2	1	CAPLAN MARK A/AU
E3	0	--> CAPLAN MICHAEL/AU
E4	1	CAPLAN NORMAN/AU
E5	7	CAPLAN SANDOR/AU
E6	1	CAPLAN SERGIO D/AU
E7	2	CAPLAN SIDNEY W/AU
E8	1	CAPLAN STANLEY Z/AU
E9	1	CAPLAN WILLIAM F/AU
E10	1	CAPLAR VESNA/AU
E11	1	CAPLAT SYLVAIN/AU
E12	5	CAPLE ADRIAN/AU

=> e sosin howard/au

E1	1	SOSIN FRANK H/AU
E2	1	SOSIN GERSHON J/AU
E3	0	--> SOSIN HOWARD/AU
E4	7	SOSIN LAURENT/AU
E5	7	SOSINSKI CHARLES W/AU
E6	1	SOSINSKI CHARLES WILLIAM/AU
E7	6	SOSINSKI GREGORY C/AU
E8	3	SOSINSKI RONALD T/AU
E9	2	SOSINSKY DAVID J/AU
E10	1	SOSINSKY EMANUEL/AU
E11	1	SOSIO ALBERTA/AU
E12	2	SOSJURKO VLADIMIR GEORGIEVICH/AU

=> file medline scisearch cancerlit biosis embase wpids

FILE 'MEDLINE' ENTERED AT 17:34:18 ON 03 JAN 1999

FILE 'SCISEARCH' ENTERED AT 17:34:18 ON 03 JAN 1999
COPYRIGHT (C) 1999 Institute for Scientific Information (ISI) (R)

FILE 'CANCERLIT' ENTERED AT 17:34:18 ON 03 JAN 1999

FILE 'BIOSIS' ENTERED AT 17:34:18 ON 03 JAN 1999
COPYRIGHT (C) 1999 BIOSIS(R)

FILE 'WPIDS' ENTERED AT 17:34:18 ON 03 JAN 1999
COPYRIGHT (C) 1999 DERWENT INFORMATION LTD

FILE 'EMBASE' ENTERED AT 17:34:18 ON 03 JAN 1999
COPYRIGHT (C) 1999 Elsevier Science B.V. All rights reserved.

=> e caplan michael/au

E1	3	CAPLAN M Z/AU
E2	1	CAPLAN MARLENE/AU
E3	12	--> CAPLAN MICHAEL/AU
E4	1	CAPLAN MICHAEL B/AU
E5	41	CAPLAN MICHAEL J/AU
E6	39	CAPLAN MICHAEL S/AU
E7	1	CAPLAN MINDY/AU
E8	13	CAPLAN N/AU
E9	3	CAPLAN N A/AU
E10	9	CAPLAN N B/AU
E11	1	CAPLAN NEIL A/AU
E12	1	CAPLAN O/AU

=> s e3 or e4 or e5 or e6

L16 93 "CAPLAN MICHAEL"/AU OR "CAPLAN MICHAEL B"/AU OR "CAPLAN MICHAEL J"/AU OR "CAPLAN MICHAEL S"/AU

=> e caplan m/au

E1	3	CAPLAN LOUIS/AU
E2	45	CAPLAN LOUIS R/AU
E3	196	--> CAPLAN M/AU
E4	10	CAPLAN M A/AU
E5	10	CAPLAN M B/AU
E6	2	CAPLAN M C/AU
E7	1	CAPLAN M D/AU
E8	3	CAPLAN M E/AU
E9	2	CAPLAN M F/AU
E10	2	CAPLAN M G/AU
E11	219	CAPLAN M J/AU
E12	16	CAPLAN M L/AU

```
=> s e3-e12

L17      461 ("CAPLAN M"/AU OR "CAPLAN M A"/AU OR "CAPLAN M B"/AU
OR
          "CAPLAN M C"/AU OR "CAPLAN M D"/AU OR "CAPLAN M E"/AU OR
          "CAPLAN M F"/AU OR "CAPLAN M G"/AU OR "CAPLAN M J"/AU OR
          "CAPLAN M L"/AU)

=> s (l16 or l17) and ige

L18        0 (L16 OR L17) AND IGE

=> s (l16 or l17) and mast cell

L19        0 (L16 OR L17) AND MAST CELL

=> s (l16 or l17) and allerg?

L20        0 (L16 OR L17) AND ALLERG?

=> e sosin howard/au

E1         1   SOSIN G P/AU
E2        68   SOSIN H/AU
E3         0 --> SOSIN HOWARD/AU
E4         3   SOSIN I I/AU
E5        30   SOSIN I K/AU
E6         2   SOSIN I N/AU
E7         4   SOSIN J S/AU
E8        15   SOSIN K/AU
E9         1   SOSIN K A/AU
E10        1   SOSIN K V/AU
E11       15   SOSIN L/AU
E12        6   SOSIN L D/AU

=> s e2

L21       68 "SOSIN H"/AU

=> s l21 and ige

L22        0 L21 AND IGE

=> s l21 and (mast cell or basophil)

L23        0 L21 AND (MAST CELL OR BASOPHIL)

=> d his

(FILE 'HOME' ENTERED AT 16:59:36 ON 03 JAN 1999)
          SET PLURALS ON

    FILE 'MEDLINE, CANCERLIT, BIOSIS, EMBASE, WPIDS' ENTERED AT
    17:01:15 ON 03 JAN 1999
L1       2224 S FC.EPSILON.RI
L2      62101 S MAST CELL
L3       6557 S FC.EPSILON. OR IGE(W)RECEPTOR
L4       1244 S L1 AND L2
L5        404 S L4 AND (ANTIBOD? OR MONOCLON? OR
CHIMERIC(W)ANTIBOD? O
L6        101 S L5 AND (ALLERG?)
L7         52 DUP REM L6 (49 DUPLICATES REMOVED)
L8         22 S L7 AND (INHIBIT? OR REDUC? OR AMELIORAT? OR
COMPET?)
L9      18456 S BASOPHIL
L10     18464 S L8 OR BASOPHIL
L11         8 S L10 NOT L9
L12       145 S (L2 OR BASOPHIL) AND L3 AND (ANTIBOD? OR
MONOCLON? OR
L13        76 DUP REM L12 (69 DUPLICATES REMOVED)

    FILE 'USPATFULL' ENTERED AT 17:27:33 ON 03 JAN 1999
L14        18 S L6 AND (INHIB? OR REDUC? OR AMELIORAT? OR COMPET?)
L15        86 S L12
           E CAPLAN MICHAEL/AU
           E SOSIN HOWARD/AU

    FILE 'MEDLINE, SCISEARCH, CANCERLIT, BIOSIS, WPIDS, EMBASE'
ENTERED
    AT 17:34:18 ON 03 JAN 1999
           E CAPLAN MICHAEL/AU
L16        93 S E3 OR E4 OR E5 OR E6
           E CAPLAN M/AU
L17       461 S E3-E12
L18         0 S (L16 OR L17) AND IGE
L19         0 S (L16 OR L17) AND MAST CELL
L20         0 S (L16 OR L17) AND ALLERG?
           E SOSIN HOWARD/AU
L21        68 S E2
L22         0 S L21 AND IGE
L23         0 S L21 AND (MAST CELL OR BASOPHIL)

=> logoff

ALL L# QUERIES AND ANSWER SETS ARE DELETED AT LOGOFF
LOGOFF? (Y)/N/HOLD:y

STN INTERNATIONAL LOGOFF AT 17:51:43 ON 03 JAN 1999
```